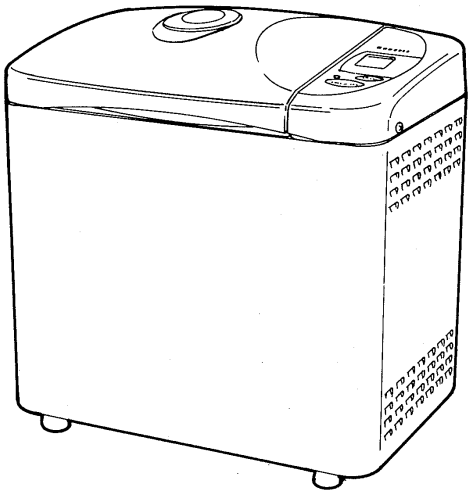
ORDER NO. KAD95080357C1
E5

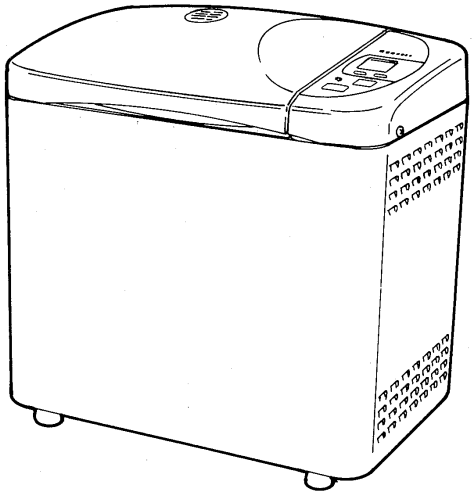
Service Manual

Automatic Bread Maker

SD-YD200, 200



SD-YD200



SD-200

Specifications

Power supply	120V AC 60Hz
Power consumed	Maximum 550W
Timer	Digital timer (up to 13 hours)
Protective device	Self-resetting motor protector (Open: 248°F, Reset: 169°F)
Dimensions (H×W×D)	approx. 35.1×34×22.8cm/14"×13 1/3"×9"
Weight	approx. 6.8kg/15 lbs. (YD200), 6.69kg/14 3/4 lbs. (200)
Accessories (Included)	Measuring cup (1 cup/8 fl.oz./240 ml) Measuring spoon

• Specifications are subject to change without notice.

Panasonic®

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(CANADA)

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFEGUARDS

When using electrical appliances, basic safety precautions should always be followed including the following:

1. READ ALL INSTRUCTIONS BEFORE USE.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from wall outlet when not in use and before cleaning. Do not immerse appliance in water or other liquid. Use a soft sponge and mild detergent when cleaning the inside of the pan or kneading blade. The cabinet may be cleaned with a cloth, dampened with a mild soap and water solution.
4. Do not touch hot surfaces. Use mitts when handling hot materials, and allow metal parts to cool before cleaning.
5. Close supervision is necessary when any appliance is used near children.
6. Do not allow anything to rest on power cord. Do not plug in cord where persons may walk on, or trip over, it.
7. Do not operate any appliance with a damaged cord or plug. Refer servicing of appliance to an authorized Panasonic servicentre if the unit should malfunction or be damaged in any manner.
8. This appliance is not intended for commercial use. It is for household use only.
9. The use of attachments not recommended by manufacturer may cause damage or injury.
10. Avoid contacting moving parts.
11. Do not use outdoors. Do not use appliance for other than intended use.
12. Do not let cord hang over edge of table or counter, or touch hot surfaces.
13. Do not place on or near a hot gas or electric burner, or in a heated oven.
14. To disconnect, grip plug and pull from wall outlet. Never pull on cord.
15. The unit may vibrate or move during the kneading process. Do NOT place the unit near the edge of a countertop. Place the unit securely where movement of the unit will not cause it to fall off the countertop.

SAVE THESE INSTRUCTIONS

Note:

A. A short power-supply cord is provided to reduce the risk resulting from becoming entangled in or tripping over a longer cord.

B. Extension cords are available and may be used if care is exercised in their use.

C. If extension cord is used:

(1) the marked electrical rating of the extension cord should be at least as great as the electrical rating of the appliance, and

(2) the longer cord should be arranged so that it will not drape over the countertop or tabletop where it can be pulled on by children or tripped over unintentionally.

D. This appliance has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not attempt to defeat this safety feature.

Basic features

Choice of bread modes

BASIC.....For breads mainly using all-purpose flour.
WHOLE WHEAT...For breads mainly using whole wheat flour.
MULTIGRAIN.....For breads which combine flours, grains, and seeds.

Choice of baking modes

BAKE .....The unit automatically mixes ingredients, kneads the dough, rises it and bakes it.
BAKE RAPID .....The unit automatically makes bread faster than the standard BAKE mode.
BAKE SANDWICH ...The unit automatically makes bread as in the BAKE mode, but uses smaller formulated recipes for a lower and denser loaf. The slices fit a traditional toaster or make a hearty sandwich.
〈SD-YD200 only〉
BAKE RAISIN .....The unit automatically makes bread as in the BAKE mode. A beeper sounds to let you know the timing to add dried fruits, such as raisins, nuts, and cheese.
DOUGH .....The unit automatically prepares dough for pizzas, dinner rolls, doughnuts, croissants, bagels, etc.
DOUGH RAISIN ....The unit automatically prepares dough as in the DOUGH mode. A beeper sounds to let you know the timing to add dried fruits as in the BAKE RAISIN mode.

–A 13-hour timer allows you to prepare everything the night before and wake up to the aroma of freshly baked bread. (See table below for available timer settings.)

Time required for each mode (when timer is not used) and availability of timer setting up to 13 hours.
The BAKE SANDWICH mode is available for SD-YD200 only.

Bread mode	Baking mode	Time	Timer
BASIC	BAKE	4 hours	√
	BAKE RAPID	3 hours	
	BAKE SANDWICH	4 hours	√
	BAKE RAISIN	4 hours	
	DOUGH	2 hours 30 minutes	
	DOUGH RAISIN	2 hours 30 minutes	

Bread mode	Baking mode	Time	Timer
WHOLE WHEAT	BAKE	5 hours	√
	BAKE RAPID	3 hours	
	BAKE SANDWICH	5 hours	√
	BAKE RAISIN	5 hours	
	DOUGH	3 hours 15 minutes	
	DOUGH RAISIN	3 hours 15 minutes	
MULTIGRAIN	BAKE	5 hours	√
	DOUGH	3 hours 15 minutes	

Baking processes

Conventional (Manual)

Manual Automatic

Measure Ingredients	Mix & Knead	Fermentation (Development of gas in the dough)	Punch (Release of gas. Dough relaxation.)	Divide (Divide the dough to equal portions)	Round (Round each portion into a ball)	Rest (Rest for further fermentation)	Shape & Place into Pan	Proof (Final fermentation)	Bake	Cool (Evaporation of vapor)	Store (Prevention from staling)

*Time required for each step will depend on factors such as room temperature, humidity, your oven, type of bread, type of ingredients, their quantity and quality.

Bread Bakery™

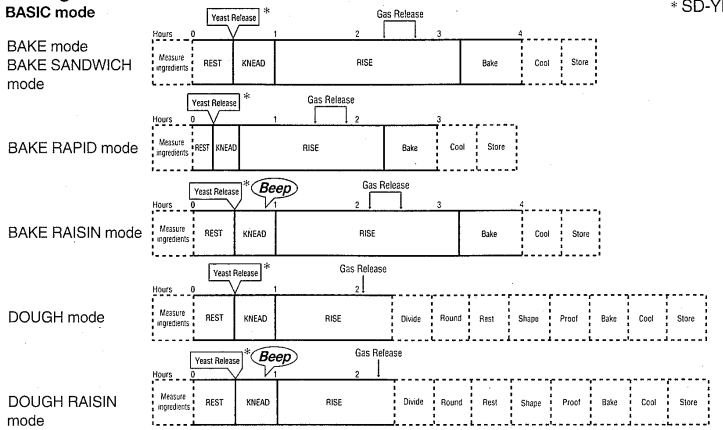
With the *Bread Bakery*™, the above steps from mixing to baking are automatic for BAKE modes.
For DOUGH modes, it is automatic from mixing to punching.

*Time required for each step will depend on factors such as room temperature and humidity.
For DOUGH modes, time will also depend on the oven you use.

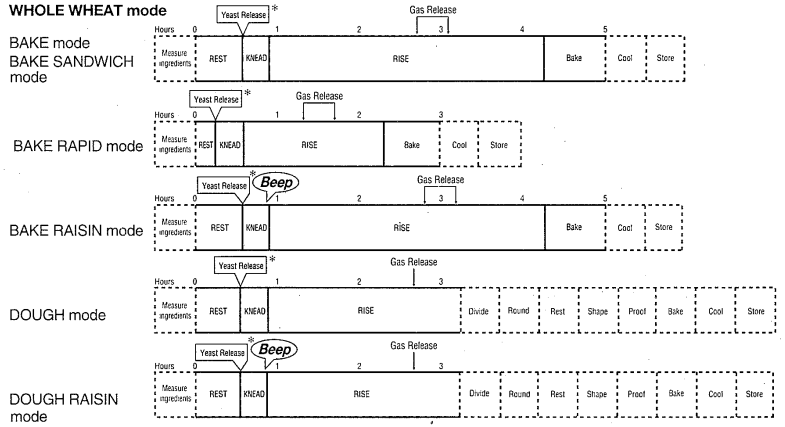
Baking Process

* SD-YD200 only

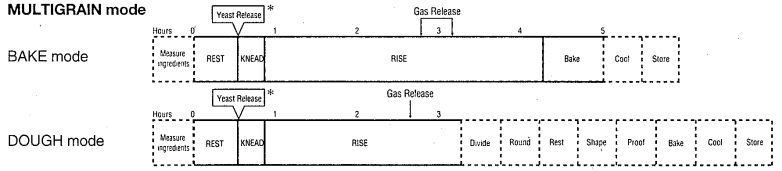
BASIC mode



WHOLE WHEAT mode



MULTIGRAIN mode

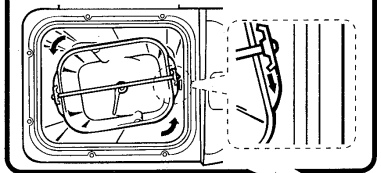


*Though some programmes appear to be the same timewise as others, each process proceeds quite differently in each programme.

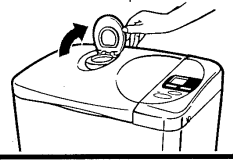
Parts identification

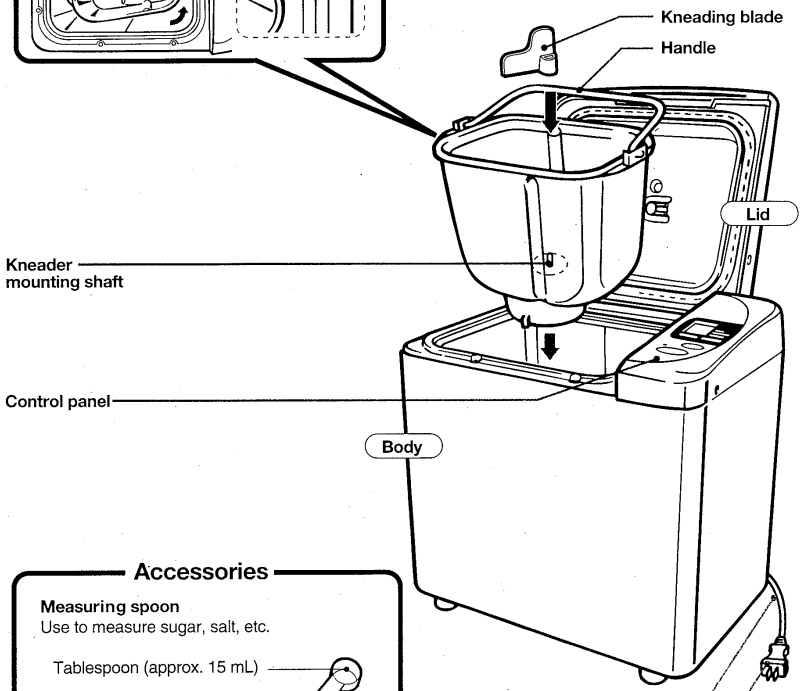
Bread pan
Slide in the pan and turn to the correct position in the unit.
Twist slightly counterclockwise to remove.

To remove



(SD-YD200 only)
Yeast dispenser
Located on the top of the lid.





Accessories

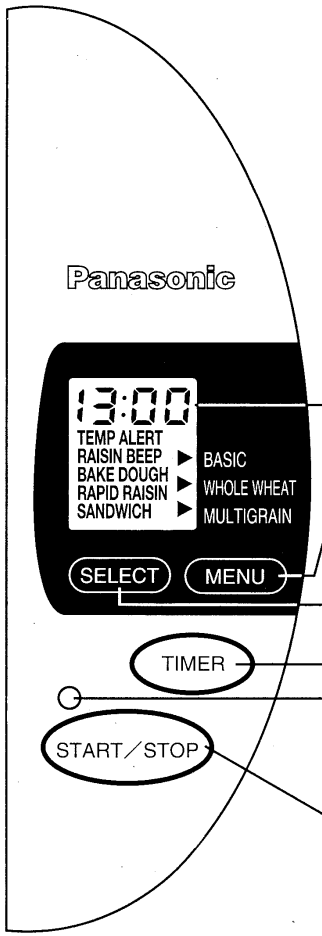
Measuring spoon
Use to measure sugar, salt, etc.

Tablespoon (approx. 15 mL)
Teaspoon (approx. 5 mL)

Measuring cup
Use to measure liquids.
(1 cup/8 fl. oz./240 mL)

Control panel-display/functions

Be sure you understand the function of each pad before using the *Bread Bakery*™.
NOTE: The unit has a protective film overlay on the control panel to prevent scratching or marring during shipping.
You may peel this film off and discard it.
The SANDWICH selection is available for the SD-YD200 only.



Display window
All modes and indications are shown here for reference. (SANDWICH is available for SD-YD200 only.)

MENU
Press to select the type of bread: BASIC, WHOLE WHEAT or MULTIGRAIN.
(It is not necessary to press this pad for BASIC.)
Each time the pad is pressed, the display will change accordingly.

SELECT
Press to select the bake mode: BAKE, BAKE RAPID, BAKE SANDWICH, BAKE RAISIN, DOUGH or DOUGH RAISIN.
(It is not necessary to press this pad for BAKE .)
Each time the pad is pressed, the display will change accordingly.

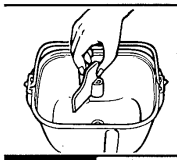
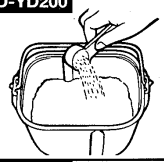
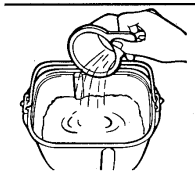
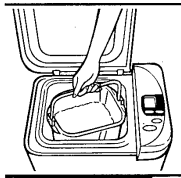
TIMER
Press this pad to set the timer.
The time will advance 10 minutes each time this pad is pressed.
The timer setting will change rapidly if constant pressure is applied to the pad.

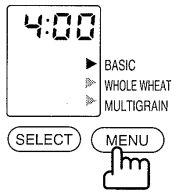
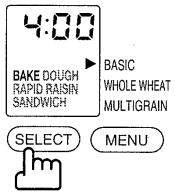
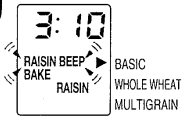
Indicator light
The red light will be lit when in operation.
It will flash when the bread baking or the dough making is completed.
It will also flash in a different frequency when operated in abnormal conditions.

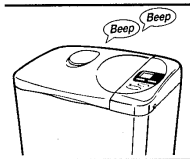
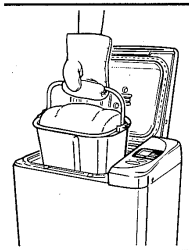
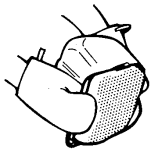
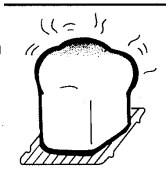
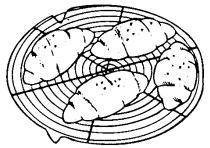
START/STOP
Press this pad to start operation or begin the timer.

Press this pad to stop operation or cancel the timer setting.
To stop operation, the pad must be pressed and held for 1 second.

How to use

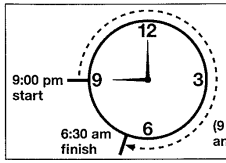
	Steps	Notes
1	 Remove the bread pan from the unit. Twist slightly counter clockwise and pull up, using the handle. Mount the kneading blade on the shaft.	Be sure that there are no crumbs around the shaft. The kneading blade is designed to fit loosely on the shaft with some loose turning.
2	**SD-YD200**  Place all the ingredients *except the liquids and instant yeast* inside the bread pan. **SD-200** Place *instant yeast* inside the bread pan. Then place flour and all dry ingredients inside the bread pan.	**RAISIN modes only** You may place dried fruits (e.g. raisins), nuts, and cheese. later when the beeper sounds to prevent them from being crushed (see step 10.)
3	 Pour water and other liquids, if any, into the bread pan.	
4	 Place the bread pan inside the body. Be sure the bread pan contacts the bottom of the unit. Fold the handle down. Close the top lid.	Wipe off any moisture or foreign matter from the outside of the bread pan before placing it in the unit. If the bread pan is not placed correctly, the dough will not be kneaded properly.
5	**SD-YD200 only** Yeast dispenser lid Fill the yeast dispenser with the correct amount of instant yeast. After START/STOP is pressed, the yeast will automatically drop into the bread pan at the proper time. Close the yeast dispenser lid.	If any moisture remains on the dispenser, the yeast may not drop completely.

	Steps	Notes
6	Plug into a 120 volt outlet. The display will light up.	Position the unit away from edge of the table or countertop. The unit may vibrate or move during the kneading process. Place the unit where it will not fall off should the unit move during the kneading process.
7	 Press MENU to choose WHOLE WHEAT or MULTIGRAIN. For BASIC, it is not necessary to press this pad.	See "Choice of bread modes" on P. 3.
8	 Press SELECT to choose BAKE RAPID, BAKE SANDWICH, BAKE RAISIN, DOUGH or DOUGH RAISIN. For BAKE, it is not necessary to press this pad.	See "Choice of baking modes" on P. 3.
9	Press START/STOP. "Rest " begins. The resting period stalbilizes the temperature of the bread pan and ingredients. After "rest", the process will proceed to knead, then to rise and finally, bake. The time remaining until the bread is finished is displayed in hours and minutes. (3:59, 3:58 · · ·) The above display is for BASIC–BAKE	When TEMP flashes, see P. 12. There will be no mixing action during resting. A clicking noise may be heard during operation. This is not a malfunction. For information of the process of each mode, see P. 4. The time required for each of the steps will vary according to factors such as voltage fluctuation and room temperature.
10	**RAISIN modes only**  In the last part of kneading*, the beeper will sound eight times, RAISIN BEEP will flash and kneading will stop for 1 minute. Add the dried fruits, nuts, cheese, etc., during this period to prevent them from being mashed. Close the lid and leave the unit. When 1 minute has passed, kneading will begin again. The above display is for BASIC-BAKE RAISIN.	*65 ~ 80 min. for BASIC, 70 ~ 120 min. for WHOLE WHEAT after START/ STOP is pressed. Do not put your finger in the dough, or touch the bread pan while adding ingredients at Raisin Beep. During operation, do not remove the pan or unplug the power cord.

	Steps	Notes
11	 The beeper will sound eight times and the indicator light will flash when the bread is baked, or dough making is completed.	
12	 **Promptly** open the lid and remove the bread pan using oven mitts. For DOUGH modes, follow the recipe directions on P. 22 – 29 for further steps.	**The bread pan will be very hot. Place on board or rack. Do not place it on plastic surfaces. Handle carefully.** If the bread is left in the unit, further browning of crust colour may be perceived.
13	 Turn the pan upside down. Shake the pan several times to release the bread. If the kneading blade comes out with the bread, use a heat-resistant plastic utensil to remove it.	**The bread and the kneading blade will be very hot.** A metal utensil may scratch the finish of the kneading blade.
14	 Place the bread on a wire rack to allow the steam to escape and to cool. 	
15	Unplug after use.	Allow at least 1 hour cool down time before the next use.

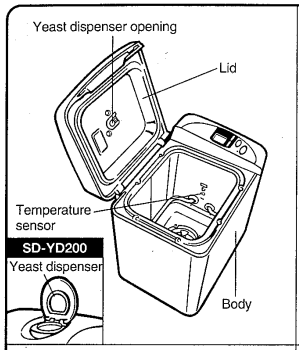
To use the timer (BAKE and BAKE SANDWICH modes only)

Follow the same steps as in pages 7—9 except step 9.
For step 9, follow the instructions below.

Steps	Notes
Press TIMER to set the amount of time in which you want the bread to be baked. Time may be set for any length of time from 4 hours to 13 hours for BASIC, from 5 hours to 13 hours for WHOLE WHEAT and MULTIGRAIN.	See P. 6 for further explanation of the timer pads.
 Example: If the present time is 9:00 pm, and you want the bread to be finished at 6:30 am tomorrow morning, set the timer to *9:30* (9 hours and 30 minutes), the time required until the completion of the bread.	
Press START/STOP.	There will be no action in the unit until the normal cycle starts.
The time remaining before the bread is finished is displayed in hours and minutes. The above display is for BASIC–BAKE	

To clean

Before cleaning the unit, unplug and allow the unit to cool.



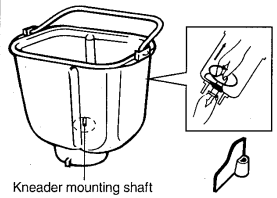
Body and Lid
Body and lid should be wiped clean with a damp cloth. Use only mild liquid detergent. For baked-on materials, use Scotch Brite nylon felt pads and detergent on the interior.

Do not use cleansers, steel wool pads, or other abrasive materials.

Do not use benzine, thinner, alcohol, etc.
Be careful with the yeast dispenser opening.

Temperature sensor
Wipe gently and avoid deforming the temperature sensor.

Yeast dispenser
Wipe clean with a dry cloth. If a damp cloth is used, the dispenser must be dry completely before reuse. Be sure the dispenser button is in position after cleaning.



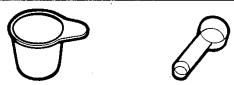
Bread pan and kneading blade
If the kneading blade cannot be easily removed from the pan by twisting the mounting shaft, pour lukewarm water into the cooled pan and allow to soak for 5 minutes. Remove the blade.

Always remove the blade and wash the pan with mild, liquid detergent after each use. Otherwise, the pan may be scratched.

Scotch Brite nylon felt pads may be used on the pan and non-stick coating.

Do not use other abrasive materials or cleansers.

Dry all parts completely before storing.



Measuring cup and spoon
Rinse and wipe dry.

Specifications

Power supply	120 V AC 60 Hz
Power consumed	550 W
Timer	Digital timer (up to 13 hours)
Protective device	Self-resetting motor protector
Dimensions (H×W×D)	approx. 35.1×34×22.8 cm/14" ×13 1/3" ×9"
Weight	approx. 6.8 kg/15 lbs.
Accessories	Measuring cup, Measuring spoon

Abnormal conditions

Condition	Reason/Cause	How to reset/restart
TEMP appears on display.	The unit is hot [above 25°C (105°F)]. This may occur during repetitive use. You must allow the unit to cool down before reusing.	Leave the unit as it is. When the unit has cooled to below 25°C (105°F), TEMP will disappear from the display window and the red indicator light will go out. This indicates that the unit is now ready to use.
ALERT is on display.	There has been a 10-minute or less power outage (the power plug has been inadvertently pulled out or the breaker has activated).	If the interruption in the power supply is momentary, the operation will not be affected. If the power is restored within 10 minutes, the bread maker will operate again. However, the bread may not turn out well.
0:00 is on display.	There has been more than 10 minutes power outage (power failure, unplugging of the power cord, or a malfunctioning of household fuse or breaker).	Remove the dough and start again using all new ingredients.
Not baked at all, although the operation appears to have proceeded.	Motor protection device has activated. This only happens when the unit is overloaded and excessive force is applied to the motor. After about 30 minutes, the motor automatically starts running again.	Check to see if the kneader mounting shaft can rotate. Yes: Make sure you did not use too much or too hard/heavy ingredients, then start again using all new ingredients. No: Service will be required.

Ingredients

Flour
Wheat flour is the main ingredient in bread.
All-purpose flour from hard wheat is used because it contains a high proportion of protein called gluten. When flour combines with liquid, the gluten develops elasticity which allows the dough to stretch, trapping bubbles of gas created by the yeast. All-purpose flour, unbleached all-purpose flour, whole wheat flour (from hard wheat, if hand milled) or bread flour (available in specialty stores), must be used when making yeast doughs. Other flour and grains have little gluten and prevent rising and are, therefore, used in smaller proportions. When adapting or changing recipes, remember to use at least 75% all-purpose flour.
Whole wheat flour requires special recipes and modes to produce a good product and cannot be freely interchanged with the total amount of all-purpose flour. Whole wheat flour contains the germ of the wheat kernel, which is high in fat. Store in a cool place and use within three months or freeze for longer storage. After this time gluten is lost; however, it may be replaced by adding 5 mL gluten flour per 250 mL (1 tsp per cup) of flour.
Bread flour, which produces excellent results, may be directly substituted for all-purpose flour. Graham flour, all-purpose flour with wheat bran or whole wheat flour, may be substituted for half of the flour of a white bread recipe. Other flours such as rye, buckwheat, cracked wheat, triticale, corn, rice, soy, and cake and pastry flour can be substituted for up to 20% of the flour content.
Excess humidity increases the moisture content of flour and may cause a denser, lower loaf which is normal.

Yeast
This microscopic, living plant is purchased in a dormant state. For the *Bread Bakery*, always use **"instant"** quick rising yeast. When mixed with sugar and liquid, yeast produces carbon dioxide and alcohol. The gas forms small bubbles or cells throughout the dough on rising and the alcohol evaporates during baking. Store yeast in a sealed container in a cool place. Cans of instant yeast are most practical and have plastic sealing lids.
Once a yeast package is opened, seal and refrigerate or freeze it. Use yeast before the "stale date". When bread or dough has not risen, often wrong or stale yeast was used.
To test whether or not yeast is still "alive", sprinkle 5 mL (1 tsp) / yeast in 50 mL (1/4 cup) warm water and 5 mL (1 tsp) sugar. Good yeast should foam in about five minutes. Discard yeast if not proven good.
The *Bread Bakery* is designed to function with yeast, not other leaveners.

Liquid
The purpose of liquid is to bind the ingredients and develop the gluten. Water will produce excellent results. Milk, whether whole, 2%, skim or powdered skim will add richness; produce a finer grain; add nutrients and a few more calories. Children will benefit from using milk as the liquid. Powdered milk will not sour using the delay timer. Potato water improves the storage capability of breads.
Fruit and vegetable juices should not account for more than half the liquid, as their acid content will interfere with rising. They should not be used with the delay timer as warm temperatures may cause rancidity.
Beer may be used for specialty breads. Selection will depend on personal preference.
Excessive amounts of liquid may result in an overflow or a decrease in height. Use room temperature liquids.

Sugar
Sugar provides food for the yeast, imparts a pleasant flavour, and causes greater browning. Sweetener may be cut down to 5 mL (1 tsp) or increased by 15 mL (1 tbsp) if desired. Brown sugar and honey may be substituted equally; however, more than 15 mL (1 tbsp) of molasses tends to impart an undesirable flavour, and reduces rising.

Salt
Salt improves flavour, conditions the gluten to enhance stretching, and limits the growth of yeast. It should not be increased and may even be eliminated for dietary reasons.

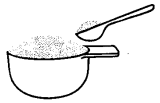
Shortening
Shortening lubricates the gluten in the dough, so that it rises easily, produces tenderness and improves keeping qualities of the bread. Butter produces the best flavour; however, margarine, solid vegetable shortening, lard and oil may be used interchangeably.

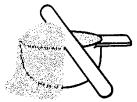
Other Ingredients
Eggs add richness to the dough, a finer crumb and pale yellow colour to the final product. Avoid using recipes with egg as an ingredient when using the delay timer.

Raisin selection:
Dried fruit, nuts, seeds, cheese, etc., will remain intact when they are added at the beep signal on either the basic or whole wheat RAISIN selections.

Suggestions for making yeast products

Measure ingredients carefully. Use nesting measuring cups for dry ingredients.
Proper measuring of flour is important to ensure optimum results. Always fluff up the flour, then scoop or pour into a correctly calibrated dry measuring cup (without pourring spout) as shown below. Do not tap the cup as the flour will pack down. Level the flour with a straight edge.


Scoop the ingredients


Level the top with a straight edge

- If a denser loaf is desired, reduce the amount of liquid by 25 mL (2 tbsp). For a lighter loaf, add 25 mL (2 tbsp).
- Choose either metric or imperial measures. Each recipe was developed based on both standards using a balanced formulae; therefore, 250 mL does not equal 1 cup. As each standard varies they will produce different size breads.
- All measuring utensils are not necessarily accurate.
- Avoid opening the lid during operation, as warm air, important for proper rising, will escape. Sometimes a quick check may be necessary if ingredients are forgotten and must be added.
- Never open the lid during the last hour of operation. This is the baking period.
- For a soft crust cover the loaf with a clean tea towel after removing from the pan, or rub the crust with butter, oil or other shortening.
- A crisp crust will form when the loaf is cooled completely.
- Cooled bread will slice easily.
- Let bread or rolls, etc., cool before storing in a plastic bag and sealing.
- To freeze bread, rolls, etc., seal in a heavy duty plastic bag.
- To defrost bread, rolls, etc., in the microwave oven, remove from the plastic bag and place on a rack or wrap in white paper towelling. Defrost for 50 seconds to 1 1/2 minutes on defrost.
- To defrost at room or refrigeration temperature, leave in the plastic bag.
- Bread may be sliced cross-wise to fit the toaster, or length wise as desired. Use a serrated bread knife or electric knife for best results.

Letting the dough rest
Some recipes suggest letting the dough rest before shaping. Use a pottery or glass bowl. Grease it generously with solid shortening. Roll the dough around in the shortening and cover with a piece of plastic wrap and a cloth. Avoid storing it in a cold place unless the recipe specifies "refrigerate". Should the resting stage be omitted, the dough will not be as light. The resting stage may be used even though not in the recipe method.

Letting the dough rise
Shape the dough and place in the baking container. Oil or grease the top with a brush, paper towel or fingertips. Cover loosely with plastic wrap or waxed paper and then a clean towel. Place in a warm area.

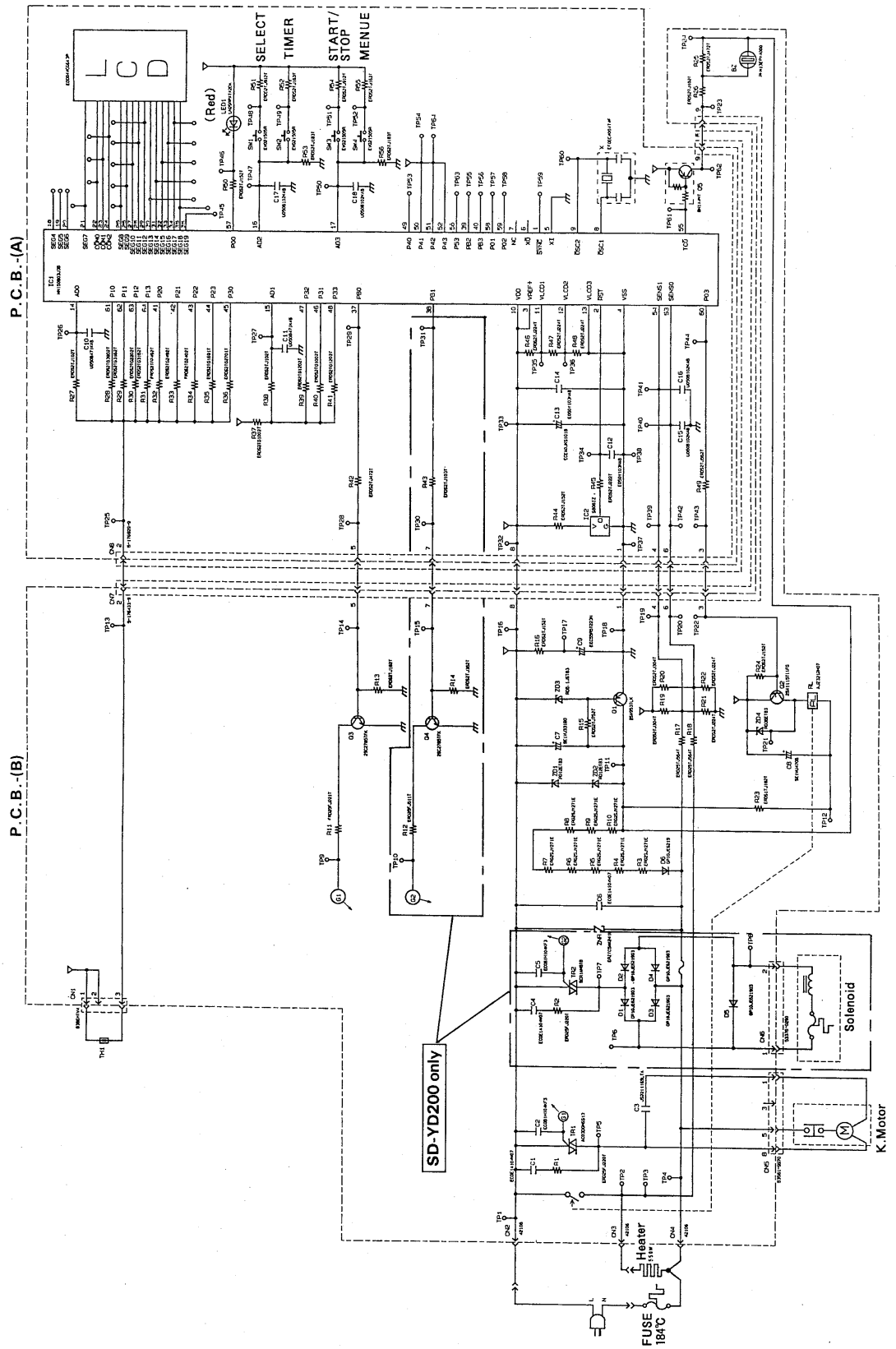
To prepare a warm area:
a) Turn the oven on to 200°F (100°C) for 5 minutes, then turn it off.
Place the container in the oven or over the exhaust element.
b) Fill a large bowl with boiling water. Place the container of dough on a rack over the bowl.
c) Use a sunlit warm window area.

Preparing the dough
- Flour the board or counter-top, rolling pin, cutters, etc., and hands, to make kneading and shaping dough easier.
- Once the dough has been shaped and placed in the baking dish, allow it to rise completely in a warm place before baking.
- Dough may also be refrigerated before shaping. Bring dough to room temperature, shape and allow to rise as the recipe directs.
- Dough may be allowed to rise in the refrigerator for up to 12 hours by adding 10 mL (2 tsp) of additional sugar to the recipe. Completely cover the pan with plastic wrap so that the air will not dry the dough. Let the dough come to room temperature for about 20 minutes before baking.
- For rolls or other hand-shaped breads, brush on an egg wash before baking to make the surface shiny and help seeds or other toppings stick to the surface before baking. This may be a beaten egg, an egg yolk beaten with milk or water, or an egg white alone..

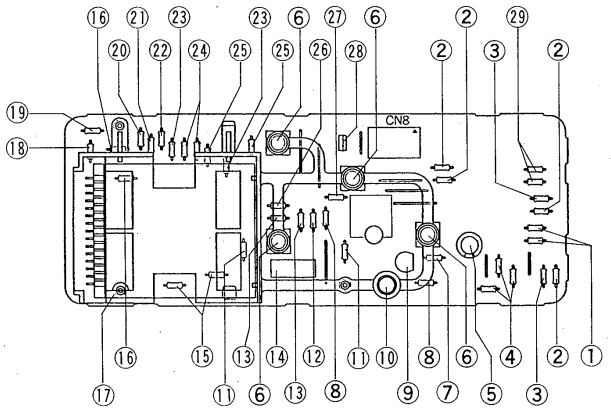
BEFORE YOU CALL FOR SERVICE

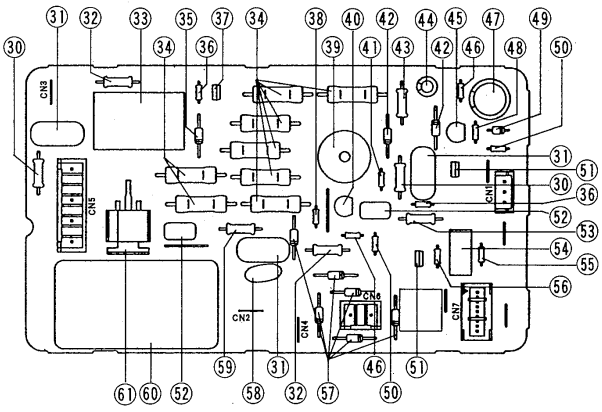
			BAKING RESULTS: / Please check the following:	Indicator light and display not lit.	Smoke emitted from steam vent. Burning smell.	Sides of bread collapse and bottom is damp.	Bread rises too much.	Collapsed after over-rising.	Bread doesn't rise enough.	Not risen or not risen enough..: and top of bread coated with flour.	Not risen or not risen enough..: and under-browned.	Not risen or not risen enough..: and browned and floured sides, centre sticky and raw.	Not risen or not risen enough..: and sides brown but flour coated bottom.	Bread too brown.	Under-baked or did not bake.	Slices unevenly and is sticky.
OPERATIONS	Unplugged / Power outage (display shows 0:00 when power resumes).			✓							✓				✓	
	START / STOP pressed accidentally after starting.			✓							✓				✓	
	Top was opened during operation.								✓		✓				✓	
	DOUGH instead of BAKE was selected.														✓	
	Ingredients spilled on heater element or baked on bottom of unit.				✓											
	Kneading blade not placed on shaft securely.									✓						
	Inaccurate measuring utensils or methods.						✓	✓	✓		✓	✓	✓	✓		
	Liquid added after kneading complete.												✓			
	Bread left in pan too long.					✓										
	Bread sliced before it was totally cool.															✓
INGREDIENTS	Ingredients used other than in recipe.						✓	✓	✓			✓	✓	✓		
	FLOUR	TOO MUCH					✓									
		NOT ENOUGH										✓				
		OLD (especially whole wheat - see page 8).							✓		✓					
	LIQUID / WATER, etc.	TOO MUCH					✓	✓				✓				
		NOT ENOUGH							✓				✓			
		High humidity adds extra water.						✓								
		Temperature of liquid was either too hot or too cold. Optimum temperature range is 20 ± 5°C (68 ± 10°F)							✓							
	YEAST	TOO MUCH					✓	✓								
		NOT ENOUGH							✓		✓					
		OLD (past good date)							✓		✓					
		OMITTED							✓		✓					
	SWEETENER/ SUGAR, etc.	TOO MUCH					✓	✓						✓		
		NOT ENOUGH							✓		✓					
		OMITTED							✓		✓					

SCHEMATIC DIAGRAM(Printed circuit board)



PRINTED CIRCUIT BOARD
ELECTORIC PARTS LOCATION AND VALUES
(SD-YD200 only)





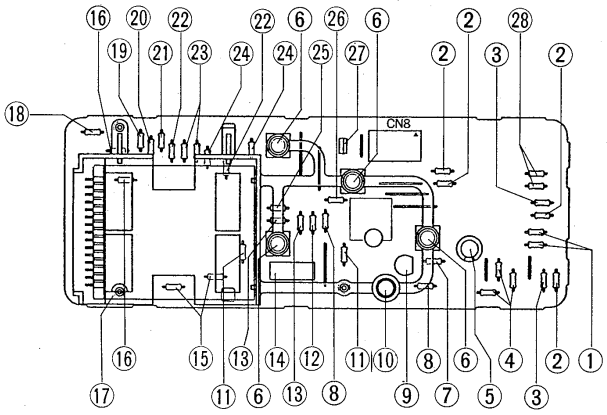
P.C.B.-(A)

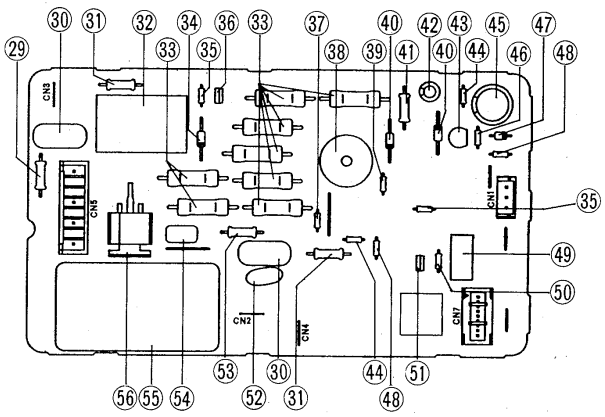
Ref. No.	Part Symbol	Part Name	Description&Part No.	Remarks
1	R51, R54	Resistor	1/4W, 4.7kΩ±5%	
2	C15~18	Capacitor	50V, 0.001μF	
3	R53, R56	Resistor	1/4W, 18kΩ ±5%	
4	R46~48	Resistor	1/4W, 220kΩ ±5%	
5	C13	Capacitor	6.3V, 100μF	
6	SW1~4	Tact switch	(EVQ21505R)	
7	R45	Resistor	1/4W, 2.2kΩ±5%	
8	R44, R50	Resistor	1/4W, 1.5kΩ±5%	
9	IC2	IC2	(S806IZ)	
10	LED1	LED1	(LN29RPXTX2DK)	(Red)
11	C12, C14	Capacitor	16V, 0.01μF	
12	R28	Resistor	1/4W, 39kΩ ±2%	
13	R29, R31	Resistor	1/4W, 31.6kΩ±2%	
14	X	Piezoneletric vibrator	4MHz, 33pF	
15	C10, C11	Capacitor	50V, 470pF	
16	R32, R33	Resistor	1/4W, 24.9kΩ±2%	
17	LCD	LCD	(EDD044CG6A3P)	
18	R43	Resistor	1/4W, 10kΩ±5%	
19	R42	Resistor	1/4W, 4.7kΩ±5%	
20	R34	Resistor	1/4W, 24kΩ ±2%	
21	R35	Resistor	1/4W, 1.69kΩ±2%	
22	R36	Resistor	1/4W, 2.7kΩ±2%	
23	R37, R40	Resistor	1/4W, 10kΩ±2%	
24	R39, R41	Resistor	1/4W, 12kΩ±2%	
25	R27, R38	Resistor	1/4W, 1kΩ±5%	
26	R30	Resistor	1/4W, 22kΩ±2%	
27	R49	Resistor	1/4W, 5.6kΩ±5%	
28	Q5	Transist	(BN1A4MT)	
29	R52, R55	Resistor	1/4W, 16kΩ±5%	
30	R1, R2	Resistor	1/4W, 22kΩ±5%	
31	C1, C4, C6	Capacitor	AC125V, 0.1μF	
32	R17, R18	Resistor	1/4W, 560kΩ±5%	

P.C.B.-(B)

Ref. No.	Part Symbol	Part Name	Description&Part No.	Remarks
33	RL	Relay	24V (AJZ3212M07)	
34	R3~10	Resistor	2W, 270Ω ±5%	
35	ZD4	Zener diode	(RD36ETB3B4)	
36	R16, R24	Resistor	1/4W, 1.5kΩ ±5%	
37	Q2	Transistor	(2SA1115T11FG)	
38	R26	Resistor	1/4W, 1kΩ ±5%	
39	BZ	Buzzer	(PKM13EPY4000)	
40	TR2	Triac 2	400V, 1A (BCR1AM8TB)	
41	R25	Resistor	1/4W, 4.7kΩ ±5%	
42	ZD1, ZD2	Zener diode	(RD12ETB3)	
43	R23	Resistor	1/2W, 1.8kΩ ±5%	
44	C8	Capacitor	35V, 47μF	
45	Q1	Transistor	(2SA953TLK)	
46	R19, R20	Resistor	1/4W, 300kΩ ±5%	
47	C7	Capacitor	35V, 330μF	
48	R15	Resistor	1/4W, 7.5kΩ±5%	
49	ZD3	Zener diode	(RD5.1JSTB3)	
50	R21, R22	Resistor	1/4W, 220kΩ±5%	
51	Q3, Q4	Transistor	(2SC2785TFK)	
52	C2, C5	Capacitor	50V, 0.1μF	
53	R12	Resistor	1/4W, 510Ω±5%	
54	C9	Capacitor	5.5V, 0.022μF	
55	R14	Resistor	1/4W, 3.6kΩ±5%	
56	R13	Resistor	1/4W, 1.8kΩ±5%	
57	D1~6	Diode	400V, 1A (1SR35400AT82)	
58	ZNR	Surge absorbers	240V (NV240D07ATB1)	
59	R11	Resistor	1/4W, 220Ω±5%	
60	C3	Capacitor	AC220V, 11μF	
61	TR1	Triac 1	(ACO3DGM6S13)	

PRINTED CIRCUIT BOARD
ELECTORIC PARTS LOCATION AND VALUES
(SD-200 only)





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5	C13	Capacitor	6.3V, 100μF	
6	SW1~4	Tact switch	(EVQ21505R)	
7	R45	Resistor	1/4W, 2.2kΩ±5%	
8	R44, R50	Resistor	1/4W, 1.5kΩ±5%	
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16	R32, R33	Resistor	1/4W, 24.9kΩ±2%	
17	LCD	LCD	(EDD0044CG6A3P)	
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26	R49	Resistor	1/4W, 5.6kΩ±5%	
27	Q5	Transist	(BN1A4MT)	
28	R52, R55	Resistor	1/4W, 16kΩ±5%	
29	R1	Resistor	1/4W, 22kΩ±5%	
30	C1, C6	Capacitor	AC125V, 0.1μF	
31	R17, R18	Resistor	1/4W, 560kΩ±5%	

P.C.B.-(B)

Ref. No.	Part Symbol	Part Name	Description&Part No.	Remarks
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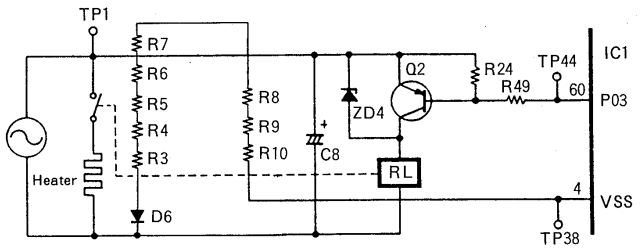
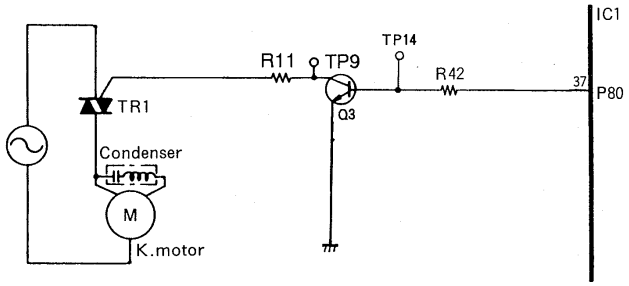
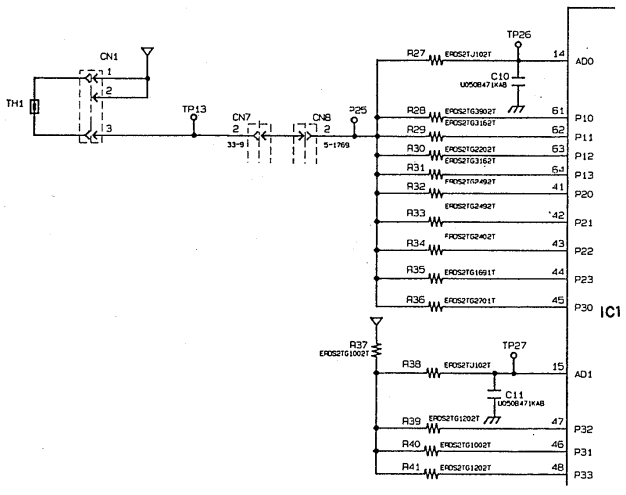
33	R3-10	Resistor	2W, 270Ω ±5%	
34	ZD4	Zener diode	(RD36ETB3B4)	
35	R16, R24	Resistor	1/4W, 1.5kΩ ±5%	
36	Q2	Transistor	(2SA1115T11FG)	
37	R26	Resistor	1/4W, 1kΩ ±5%	
38	BZ	Buzzer	(PKM13EPY4000)	
39	R25	Resistor	1/4W, 4.7kΩ ±5%	
40	ZD1, ZD2	Zener diode	(RD12ETB3)	
41	R23	Resistor	1/2W, 1.8kΩ ±5%	
42	C8	Capacitor	35V, 47μF	
43	Q1	Transistor	(2SA953TLK)	
44	R19, R20	Resistor	1/4W, 300kΩ ±5%	
45	C7	Capacitor	35V, 330μF	
46	R15	Resistor	1/4W, 7.5kΩ±5%	
47	ZD3	Zener diode	(RD5.1JSTB3)	
48	R21, R22	Resistor	1/4W, 220kΩ±5%	
49	C9	Capacitor	5.5V, 0.022μF	
50	R13	Resistor	1/4W, 1.8kΩ±5%	
51	Q3	Transistor	(2SC2785TFK)	
52	ZNR	Surge absorbers	240V (NV240D07ATB1)	
53	R11	Resistor	1/4W, 220Ω±5%	
54	C2	Capacitor	50V, 0.1μF	
55	C3	Capacitor	AC220V, 11μF	
56	TR1	Triac 1	(AC03DGM6S13)	

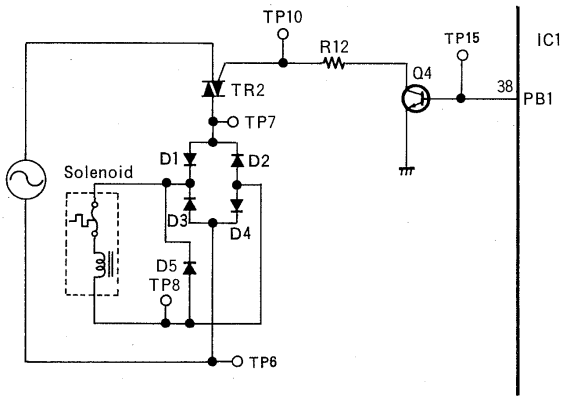
PCB CIRCUIT DESCRIPTIONS

Action	Operation	Circuit
Connection of power cord	The power supply circuit functions and the AC and DC voltage are supplied to the various circuits.	• Low-voltage transformer • Power supply circuit
	◊ 4 MHz is oscillated by the oscillator (X) connected to terminals (8) and (9) of the IC. (For the microcomputer)	• Oscillation circuit
	◊ The 0-volt pulse circuit (R17) functions and a pulse synchronized to the power supply frequency is input to terminal (54) (0-volt pulse input terminal) of the IC1.	• 0-volt pulse circuit
Input from the control pads	When the pads are pressed, the signals are input to terminals (16) and (17) (switch input terminals) of the IC1.	• Control section (switch circuits)
Indications on the LCD	In accordance with the signals output from terminals (22) ~ (24) (common terminals) of the IC1 the signals output from terminals (25) ~ (36) (segment terminals) of the IC1 are applied to the segments of the LCD to be indicated, and those segments light up.	• Display circuit
Relay operation	The relay signal is output from terminal (60) of the IC1 and the relay (RL) is operated via Q2. HIGH level (approx. 5 V) → relay (RL) is OFF LOW level (approx. 0 V) → relay (RL) is ON 	• Relay drive circuit
Buzzer signal	The buzzer signal is output from terminal (55) of the IC1 when a button is pressed, etc., and the buzzer is sounded.	

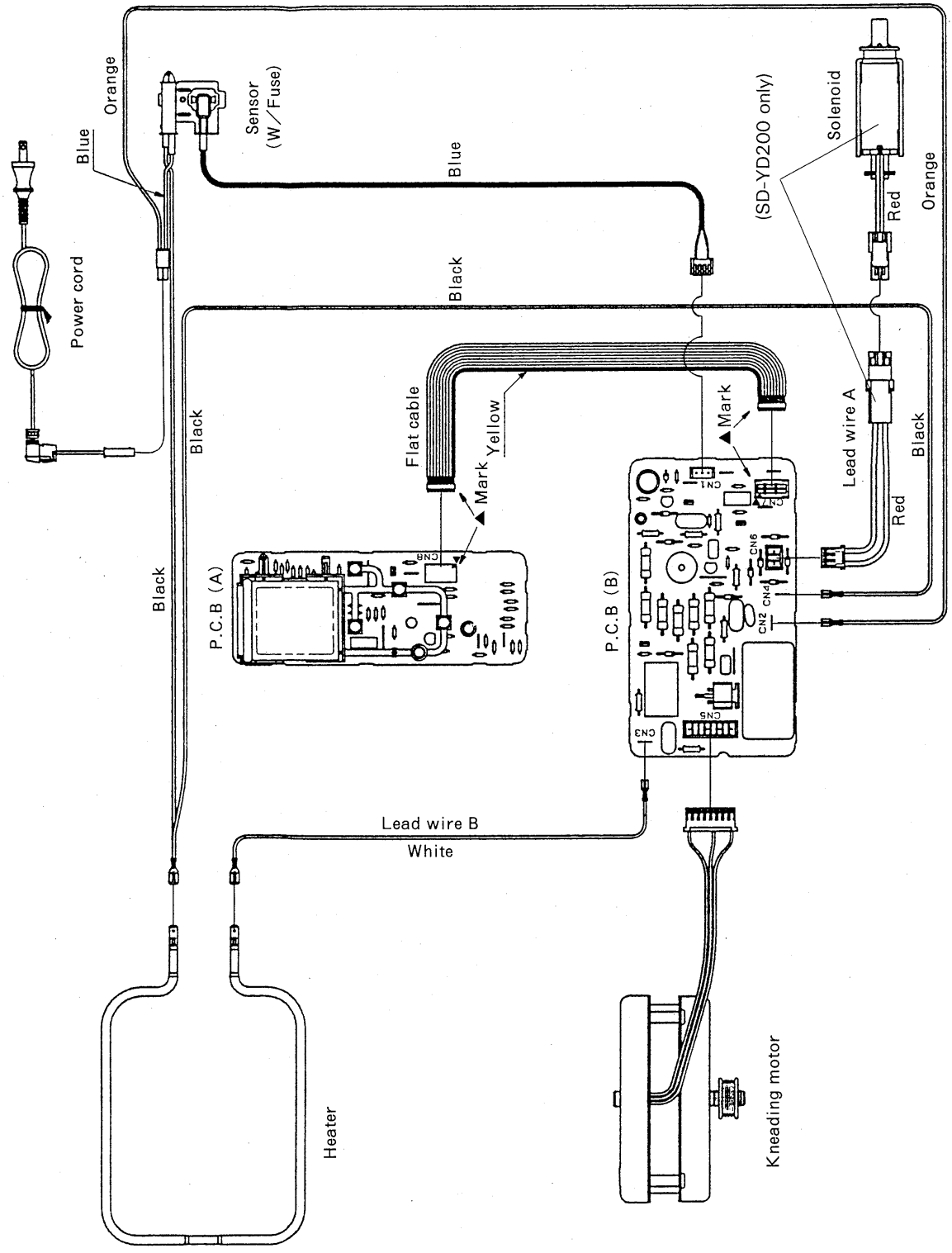
PCB Circuit-Continued

<table>
<tr><th>Action</th><th>Operation</th><th>Circuit</th></tr>
<tr><td>Triac operation
TRIAC 1</td><td>The triac 1 signal is output from terminal (37) of the IC1, and the signal is applied to the gates of triac 1 (TRIAC 1) via Q3
(Kneading Motor)
<table>
<tr><td>IC terminal ㊲
(Triac 1 signal)</td><td>Kneading motor status</td></tr>
<tr><td>HIGH level
(approx. 5 V)</td><td>Clockwise revolution</td></tr>
</table>

</td><td>• Motor drive circuit
(Kneading Motor)</td></tr>
<tr><td>Input of the temperature signals</td><td>The signals are input to terminals (14) and (15) of the IC1 in order to compare the reference voltage with the voltages corresponding to the temperatures determined by the sensor and the various resistors.

</td><td>• Temperature detection circuit</td></tr>
</table>

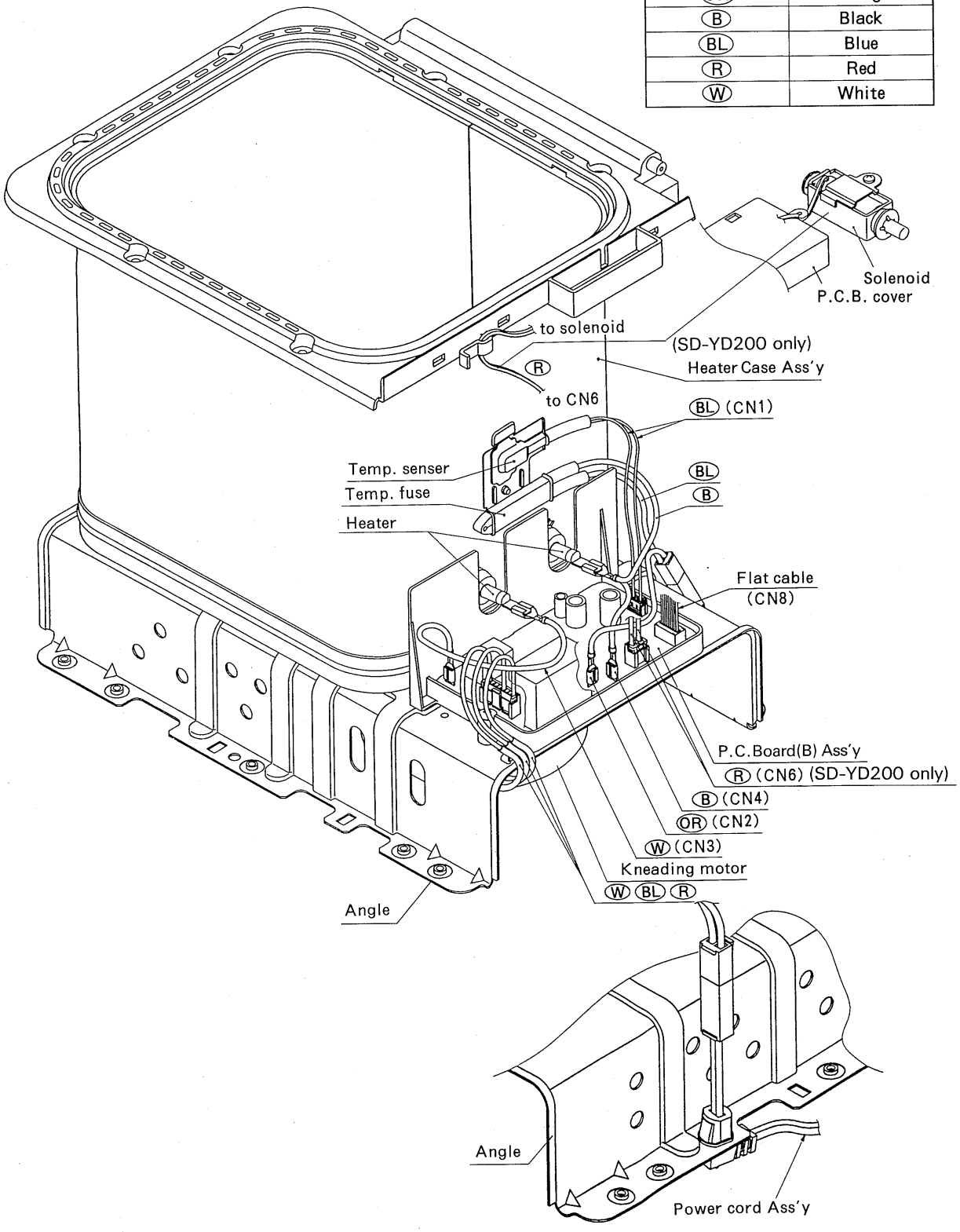
PCB Circuit-Continued (SD-YD200 only)

Action	Operation	Circuit
Adding of the yeast	The triac 2 signal is output from terminal(38)of the IC1 and applied to the gates of triac 2 (TRIAC 2). The application of the signal to the gates of triac 2 (TRIAC 2) causes current to flow to the solenoid, the yeast dispensing chute functions, and the yeast is added to the bread case. **HIGH level (approx. 5 V) → does not function** **LOW level (approx. 0 V) → functions** 	**Solenoid drive circuit**

PICTORIAL WIRING DIAGRAM

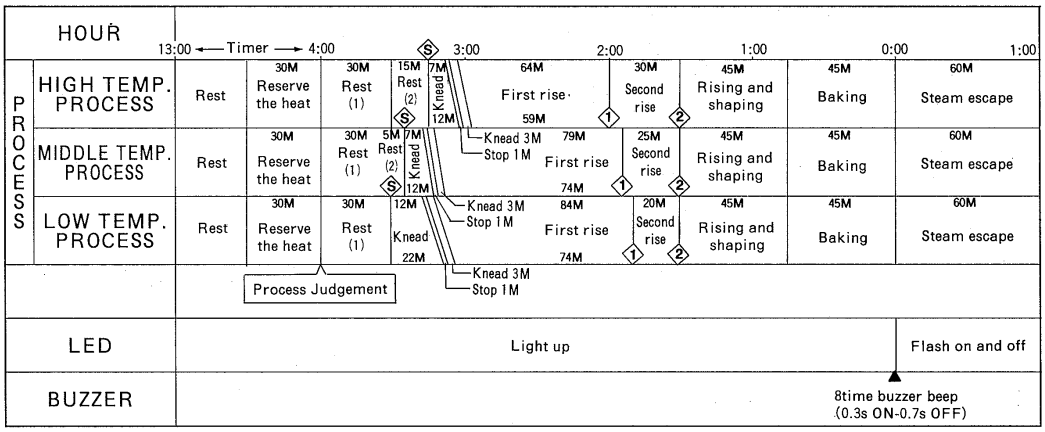


Symbol	Color
(OR)	Orange
(B)	Black
(BL)	Blue
(R)	Red
(W)	White



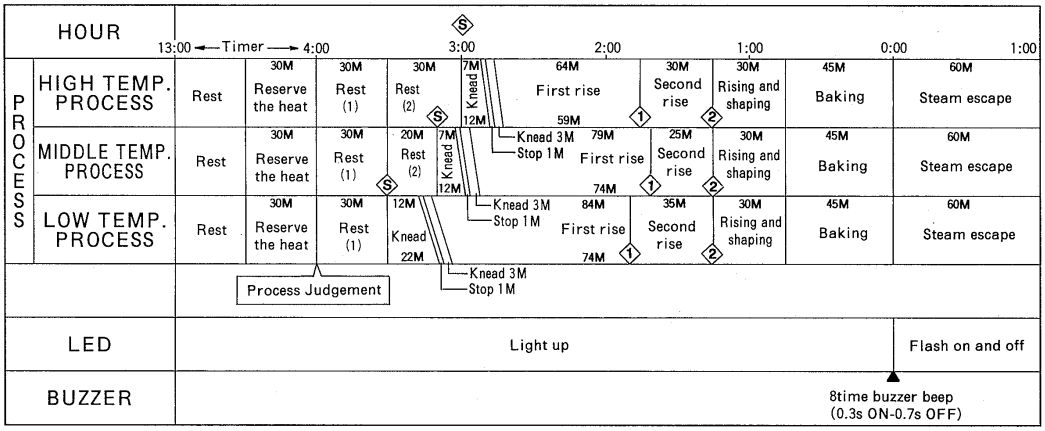
DUTY CYCLE TIME ALLOCATION (BREAD PROCESS DIAGRAM)

■ BASIC BREAD BAKE PROCESS



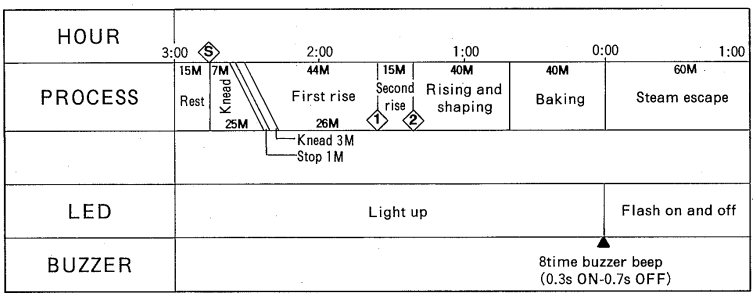
Ⓢ Solenoid action (Yeast drop)
1.5s ON−1s OFF−1s ON −1s OFF−1s ON 3 times
①～② Gas release

(SD-YD200 only)
■ BASIC BREAD BAKE (SANDWITCH) PROCESS



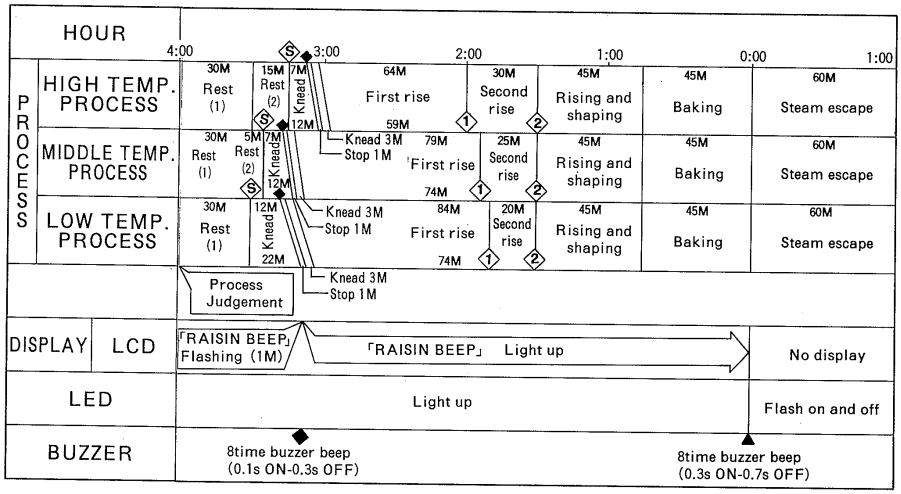
Ⓢ Solenoid action (Yeast drop)
①～② Gas release

■ BASIC BREAD BAKE (RAPID) PROCESS



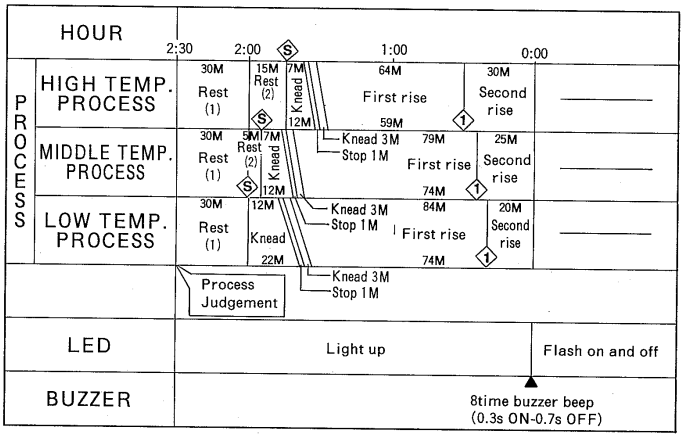
Ⓢ Solenoid action (Yeast drop)
①～② Gas release

■ BASIC BREAD BAKE (RAISIN) PROCESS



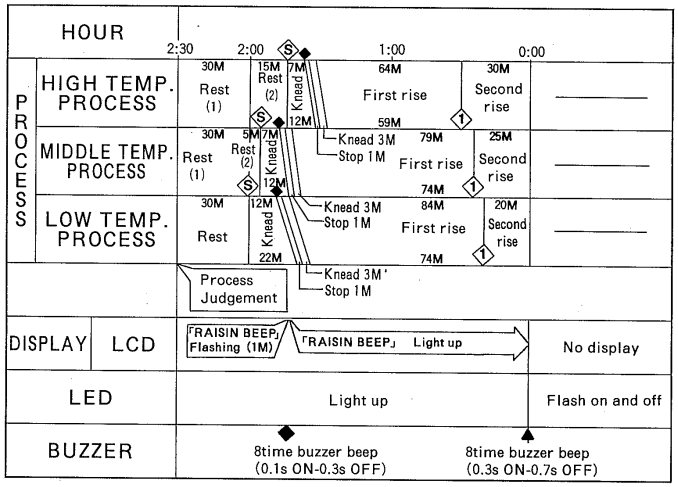
Ⓢ Solenoid action (Yeast drop)
① ~ ② Gas release

■ BASIC BREAD DOUGH PROCESS



Ⓢ Solenoid action (Yeast drop)
① Gas release

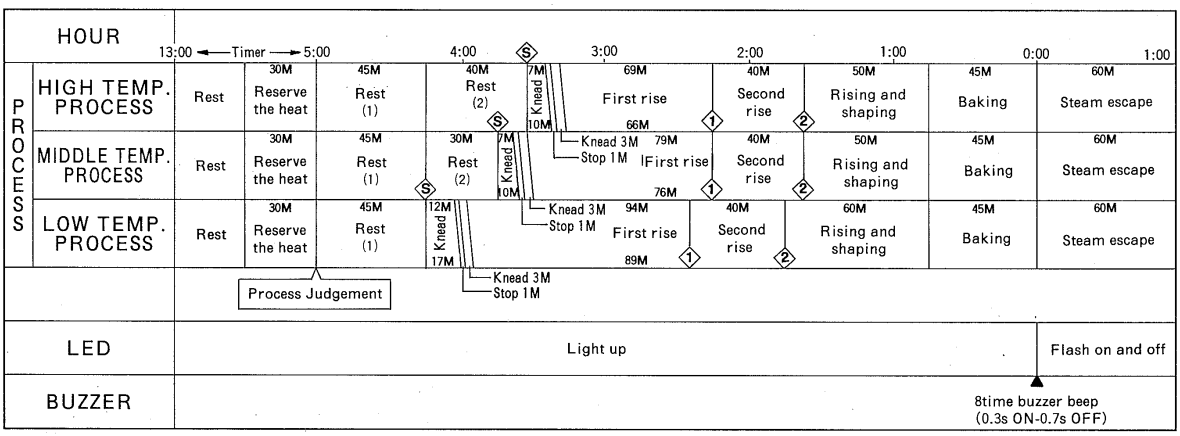
■ BASIC BREAD DOUGH (RAISIN) PROCESS



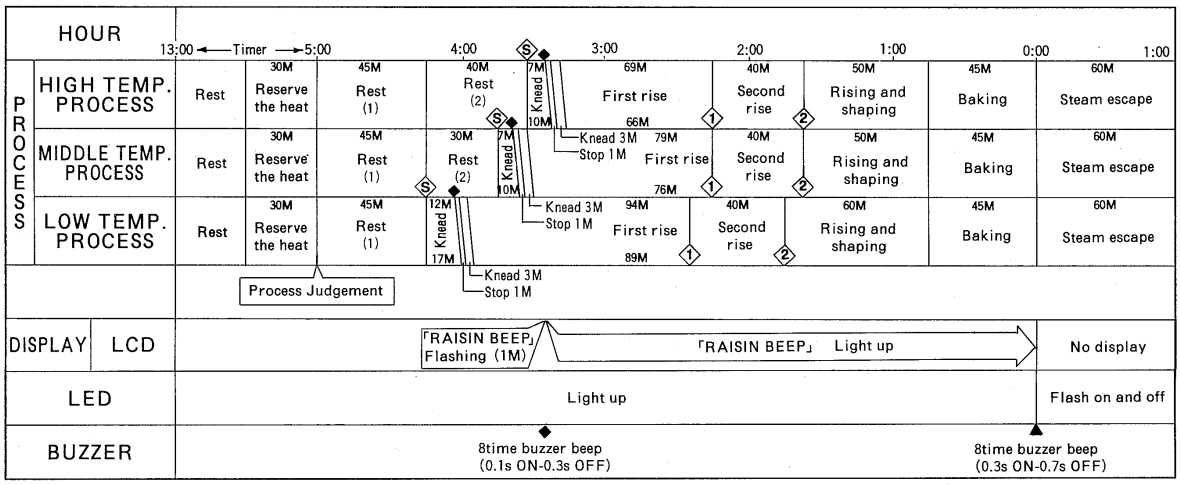
Ⓢ Solenoid action (Yeast drop)
① Gas release

Allocation time-Continued

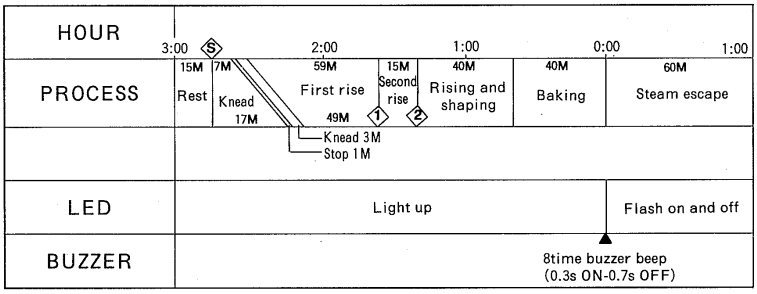
■ WHOLE WHEAT BAKE & BAKE (SANDWITCH) PROCESS (SD-YD200 only)



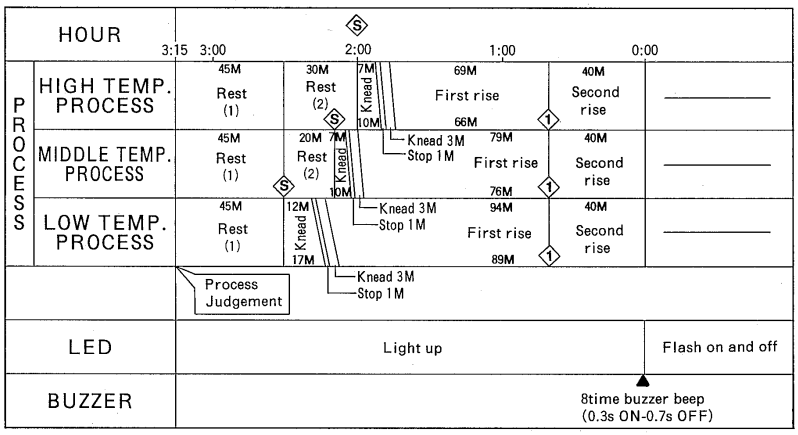
■ WHOLE WHEAT BAKE (RAISIN) PROCESS



■ WHOLE WHEAT BAKE (RAPID) PROCESS

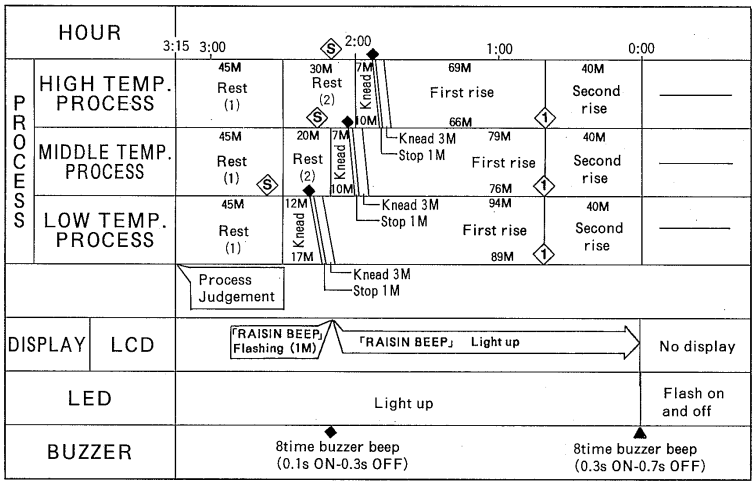


■ WHOLE WHEAT DOUGH PROCESS



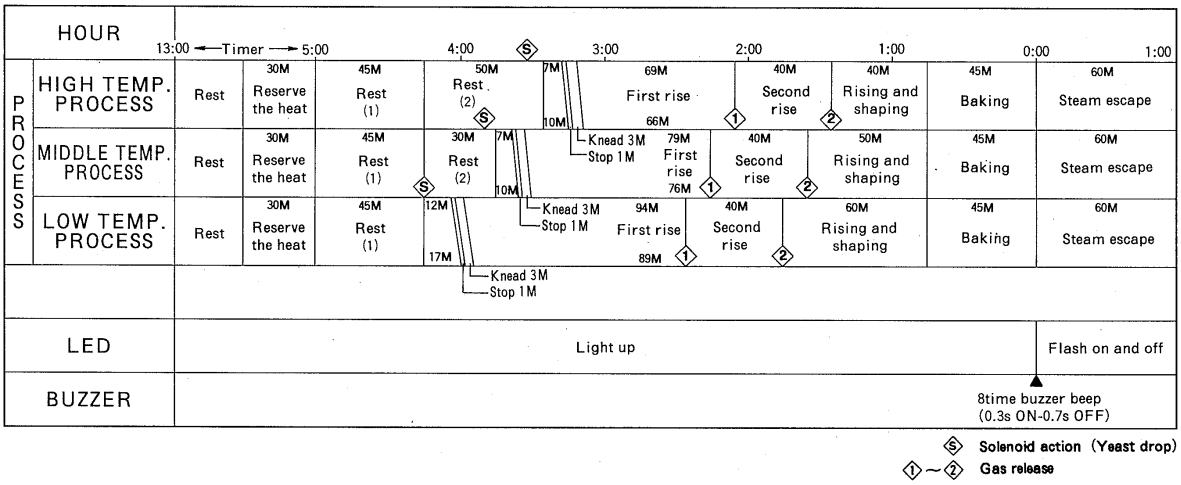
Ⓢ Solenoid action (Yeast drop)
① Gas release

■ WHOLE WHEAT DOUGH (RAISIN) PROCESS



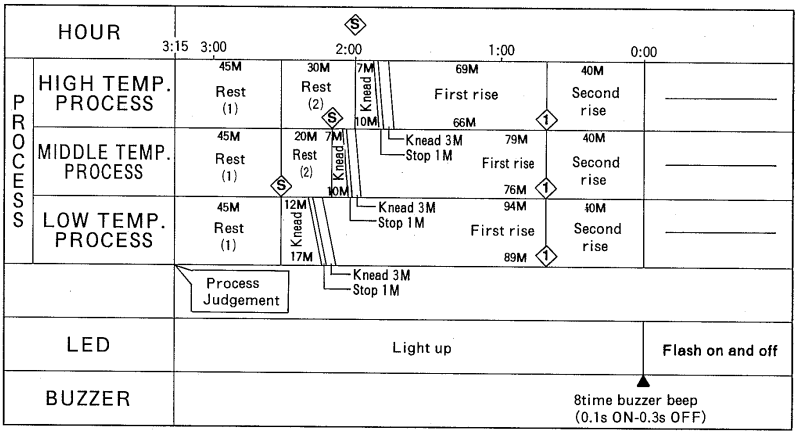
Ⓢ Solenoid action (Yeast drop)
① Gas release

■ MULTIGRAIN BAKE PROCESS



Ⓢ Solenoid action (Yeast drop)
① ~ ② Gas release

■ MULTIGRAIN DOUGH PROCESS



Ⓢ Solenoid action (Yeast drop)
① Gas release

FUNCTION QUICK CHECK TEST PROCEDURE MODES

■ **Quick check of the circuit board (LCD display test)**

(Before beginning the troubleshooting procedure, perform the following quick check of the circuit board to determine whether or not the circuit board is faulty.)

Follow the procedure below. If there are no problems and all of the functions operate correctly, the circuit board assembly can be considered to be functioning properly.

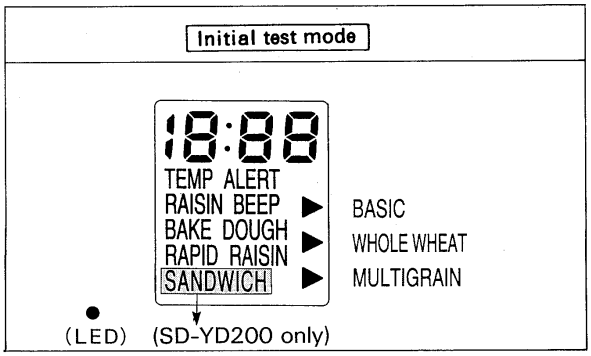
(With the exception, however, of motor operation , and temperature control for rising and baking.)

(1) Insert the power cord into an electrial outlet while simultaneously pressing all three of the (MENU), (SELECT), and (TIMER) pads,

then within three seconds of the above both the (MENU), (SELECT) pads, simultaneously.

If the circuit board is functioning properly, the intitial test mode will be displayed as shown.

(2) From this mode, you can proceed to the following performance check functions. To cancel, press the (START/STOP) pad.



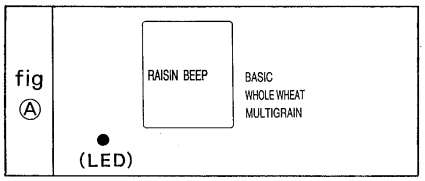
■ **Function performance confirmation test**

Before troubleshooting, use the following procedure to perform the function performance check and refer to the "Troubleshooting Chart" to find the locations of the malfunctions and carryout the appropriate correction measures.

A. Motor operation test

(1) From the initial test mode, press the (MENU) pad once.

(2) The LCD display will indicate as shown, and the operation LED (Red) will light as shown by fig Ⓐ.



(3) The yeast dispensing chute will open for one second. (SD-YD200 only)

(4) The motor will begin operation in the order shown by fig Ⓑ.

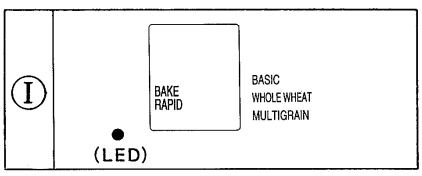
fig Ⓑ		
	1. Forward (clock wise) revolution for 1.0 second.	2 times repeat
	2. 1.0 second off.	
	3. Continuous forward (clockwise) revolution.	
	4. Stop for ten minute after, and initial test mode will light up.	

(5) To return to initial test mode, press (START/STOP) pad once.

B. RISE mode confirmation test.

(1) From the intial test mode, press the (TIMER) pad once.

(2) The LCD indication shown in Ⓘ will appear, and the operation LED (Red) will light up.



Quick check-Continued

(3) Next, the temperature will be adjusted at relay current flow ratio of 3.2/32 (10 percent) in order to maintain a bread case temperature of approximately 90°F (32.5°C)
In order to measure the rising temperature of the Bread pan thermometer.
After allowing the unit to sit in this condition for at least approximately one hour, check the temperature on the mercury thermometer. The unit is functioning properly if the temperature is between 82°F (28°C) and 97°F (36°C).

(4) To return to initial test mode, press (START STOP) pad once.

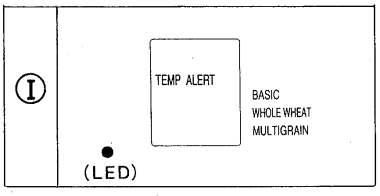
C.BAKE mode confirmation test

(1) From the initial test mode, press the (SELECT) pad once.

(2) The LCD indication shown in ① will appear, and the operation LED (Red) will light up. (one second)

(3) The heater will be heated at relay current flow ratio of 32/32 (100percent). When the 309°F (154°C), the display will return to the initial test mode.

(4) To return to initial test mode, press (START STOP) pad once.



CAUTIONS TO OBSERVE WHEN HANDLING THE PCB

■ **Precautions**

• **HOW TO PROCEED**

1) First, after you understand these "Precautions", operate the control pads of the unit being repaired in accordance with the "Troubleshooting Chart", check the LCD, LEDs, and power consumption under the prescribed troubleshooting conditions, and troubleshoot according to the applicable column.
2) Always proceed with the steps in order: 1 → 2 → 3, etc.
After the correct condition is obtained in one step, move on to the next step.
3) Be sure that the bread case is placed inside the unit Bakery when doing the troubleshooting.

• **CAUTIONS CONCERNING THE HANDLING OF THE MICROCOMPUTER AND THE CONTROL CIRCUIT**

This microcomputer uses a MOSFET called a C-MOS digital IC as its basic component. This type of device may suffer insulation breakdown as a result of static electricity charged in clothing, the human body, or other objects, or leak current from a soldering gun or other tool, so care must be taken when doing any repairs.

- Ground your body through a resistance of several megohms.
- When using a soldering gun, be sure that it is insulated properly and grounded. A soldering gun designed for work with electronic appliances is best.
- When handling electronic parts, do not touch the pins.
Also, do not place them on a conductive material charged with static electricity.
- Be careful to insert the parts into the printed circuit board only in the correct direction.
- When using a tester to check the continuity, use the maximum resistance range (x10,000) because there is the danger of the application of a voltage being higher than the rating.
- Keep the soldering time as short as possible (within a few seconds).
- Unplug the power cord before attempting to replace any of the parts.

DISASSEMBLY PROCEDURE

Removal of PCB (A)

(a) Remove the two screws on the front rear corner which secures the control panel.

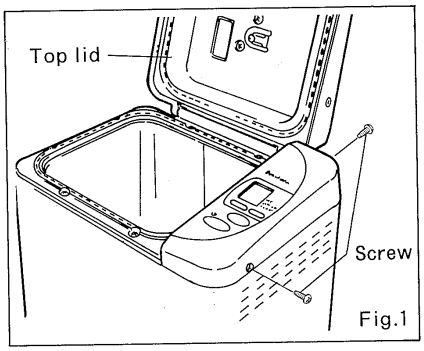
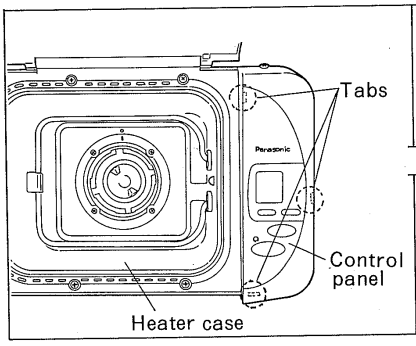


Fig.1

(b) Move front control panel towards the rear and lift off carefully.



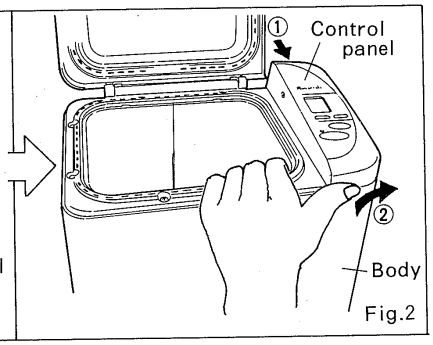


Fig.2

(c) Carefully disconnect the PCB connectors.
Remove the one screw which secures PCB cover assembly.

Removal of Positive Lock connector
The positive lock connector is a specialty designed loose free connector.
To remove this connector, pull the lead wire by pressing an extruded lever in the center of receptance tirminal.

(d) Remove the PCB cover assembly by lifting up from the right side.

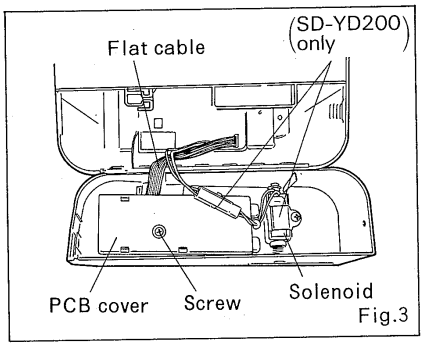


Fig.3

(e) To separate the PCB from the cover assembly, bend back the six holding tabs white lifting out the PCB.

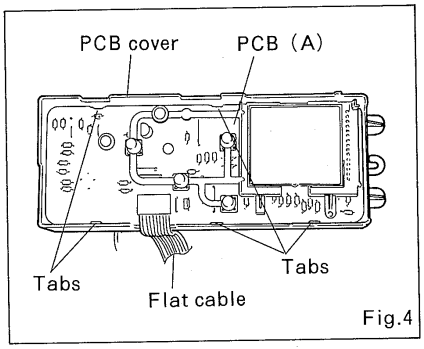


Fig.4

★The assembly procedure is the reverse of the disassembly procedure.

Remove of PCB (B)

(a) Turn the body upside down and remove the four mounting screws in order to remove the feet. (Fig. 1)

(b) Remove the four Bottom plate mounting screws in order to remove the Bottom plate.

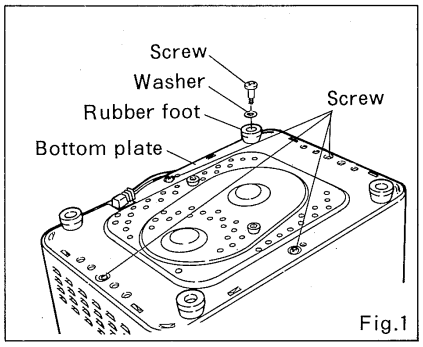


Fig.1

(c) Remove the six screws which secure the heater case from the sides, and then pull upward on the heater case to remove it. (Fig. 2&3)

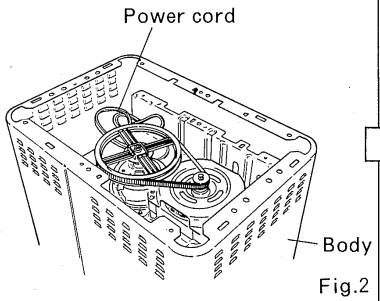


Fig.2

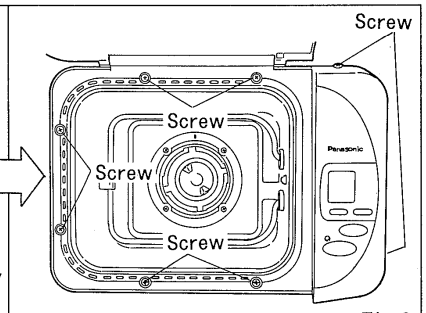


Fig.3

(d) Pull out and disconnect the connecter onthe circuit board.

Removal of Positive Lock connector
The positive lock connector is a specialty designed loose connector.
To nremove this connector, pull the lead wire by pressing an extruded lever in the center of receptance tirminal.

(e) Remove the screw

(f) Remove the PCB holder assembly. (Fig.4)

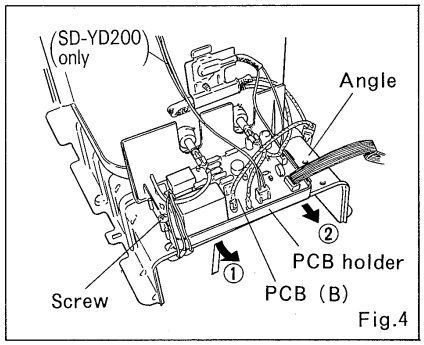


Fig.4

※ Before turning the body upside down, remove the kneader and bread case.

1. Bottom plate, and body Disassembly

(a) Turn the body upside down and remove the four foot mounting screws in order to remove the feet. (Fig. 1)

(b) Remove the two Bottom plate mounting screws in order to remove the Bottom plate.

(c) Remove the six screws which secure the heater case from the sides, and then pull upward on the body to remove it. (Fig. 2&3)

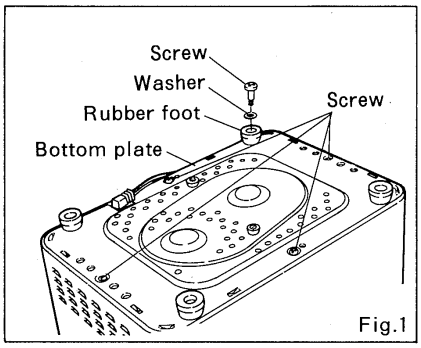


Fig.1

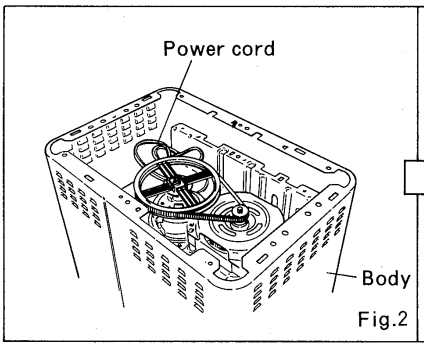


Fig.2

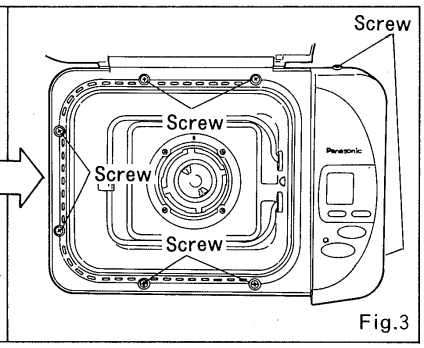


Fig.3

2. Power cord

(a) Disconnect the power cord connectors.

(b) Push the cord bushing and push out. (Fig.4)

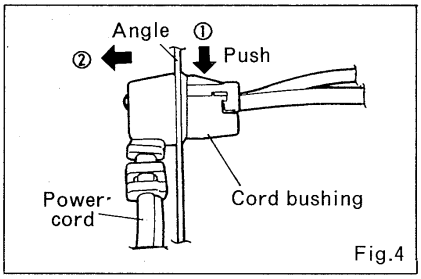


Fig.4

3. Temperature sensor (& fuse) assembly

(a) Remove the sensor mounting screw.

(b) Pull out and disconnect the CN1, CN4 and heater tirminal connector (blue lead wires) for power cord connector.

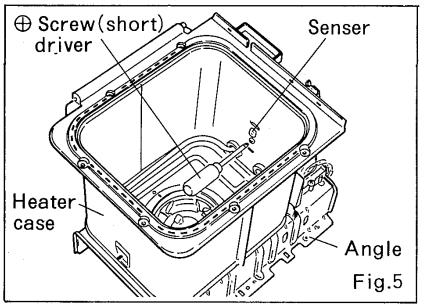


Fig.5

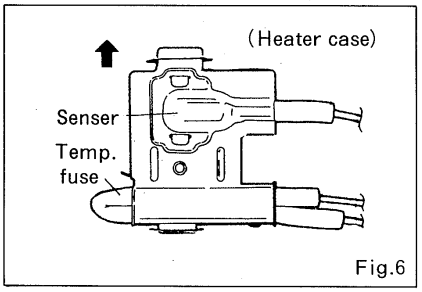


Fig.6

4. Top lid

(a) Loosen the one hinge screw (Left) and remove the top lid.

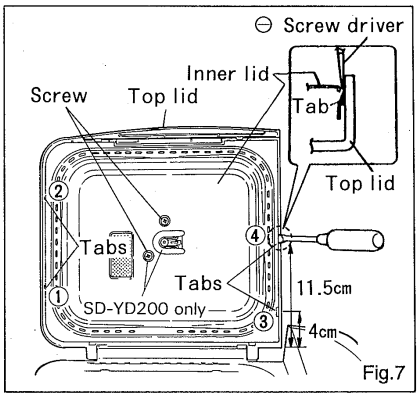


Fig.7

5. Inner lid

(a) Remove the two screws whitch secure the inner lid. (SD-YD200)

(a) Remove the one screw whitch secure the inner lid. (SD-200)

(b) Remove the four tabs whitch secure the inner lid. (Order: ①→②→③→④) (Fig-7)

(SD-YD200)

6. Yeast dispensing chute, Yeast dispenser (w/steam vent), Lever (Fig-8)

(a) Remove the Yeast dispensing chute.

(b) Remove the one screw whitch secure yeast dispenser (w/steam vent).

(c) Remove the one screw whitch secures the lever.

(SD-200)

6. Steam vent

(a) Remove the steam vent.

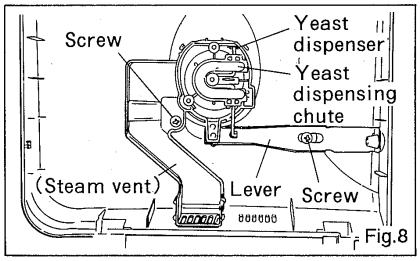


Fig.8

7. Heater

(a) Remove the two heater terminal disconnect.

(b) Press the heater bobbin B (two) from outside the heater case. (Fig-9)

(c) Remove the screw which secure heater bobbin A and remove the heater.

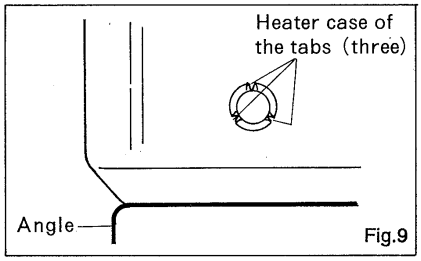


Fig.9

※Assembly instruction
Set up the tabs (three)

8. Belt, Pulley and Connector lower (Fig-10)

(a) **Remove the belt.**

(b) **Remove the nut and the pulley B.**

(c) **Remove the U-ring and pull out the connector (lower) from the heater case side.**

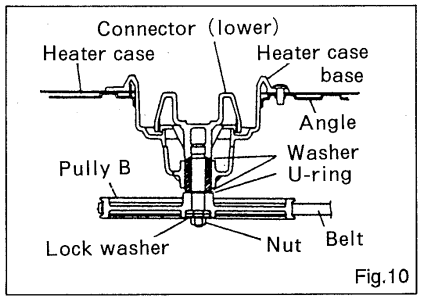


Fig.10

9. Heater case base, heater case

(a) **Remove the four screws which secure the heater case base, and remove the heater case base and the heater case.** (Fig-11)

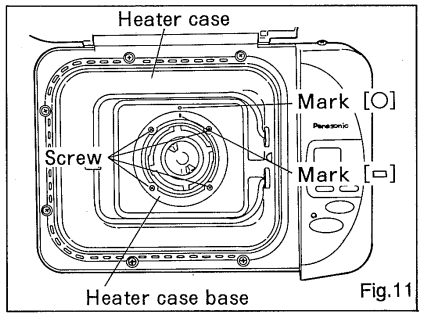


Fig.11

10. Bread pan, Mounting shaft unit

(a) Turn the bread pan upside down, remove the three screws securing the mounting shaft and remove the mounting shaft. (Fig-12)

(b) Remove the rubber seal.

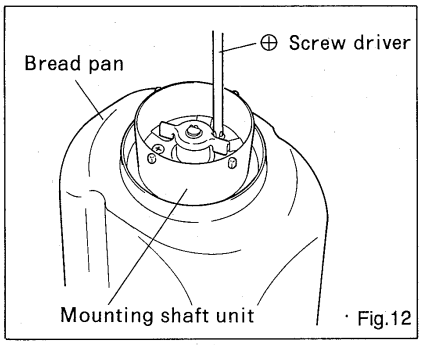


Fig.12

※ ASSEMBLY INSTRUCTIONS

(a) First place the rubber seal over the shaft opening on the bread pan as shown in the figure. (Fig-13)

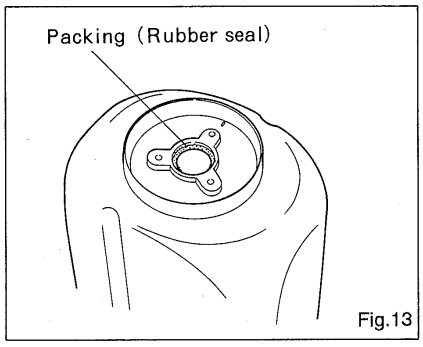


Fig.13

(b) Install and align the mounting shaft with the three screw holes on the bread pan. (Fig-14)

(c) Reinsert screws and tighten.

Caution: Do not forget to insert the rubber seal when assembling. Also be sure not to twist this seal during assembly. When replacing the shaft mounting unit, be sure to use a new rubber seal (Packing) and three new screws.

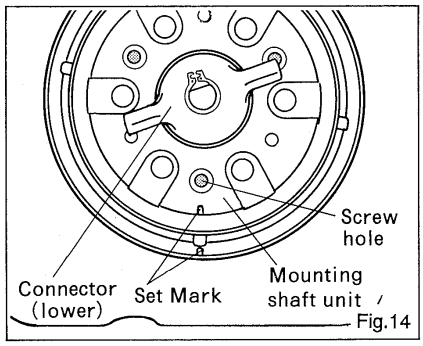
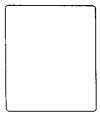
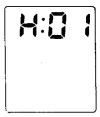


Fig.14

TROUBLESHOOTING GUIDE

NOTE: Test points (TP) are located on the bottom side of the Printed Circuit Board.

	Operation procedure	LCD indication	Symptom	Check/Result	Remedy
Step 1	Plug the power cord into an electrical outlet.	Correct display.	If LCD indicates correct display, check the following possible problems before proceeding to Step 2.	Correct condition; proceed to Step 2.	
			Continuous current flow to the heater.	Is the relay (between C-NC) short circuited? (Is there continuity 0 Ω between TP(1)- (2)?) YES → NO	• Replace the circuit board assembly (or relay) • Replace the circuit board assembly.
			Continuous forward revolution of the kneading motor.	Is triac 1 (between T1-T2) short circuited? (Is there continuity between TP(1)-(5)? 0 Ω) YES → NO	• Replace the circuit board assembly (or triac 1) • Replace the circuit board assembly.
		 No indication.	If no indication, check power supply.	Is there approx. 120 VAC between TP(1)–(4)? YES / NO Is there continuity in the power cord? NO YES Is there continuity in the temperature fuse? NO YES Is the copper film fuse on the circuit board blown? YES	• Replace the power cord. • The temperature fuse is blown; replace it as an assembly. • Replace the circuit board assembly.
		 Light up.		Is there continuity in the temperature sensor. NO YES [Sensor (thirmistor) barn out ⇩ 205k~250kΩ]	• Replace the circuit board assembly (or sensor) • Replace the circuit board assembly.
		Any combination other than the above.			• Replace the circuit board assembly.

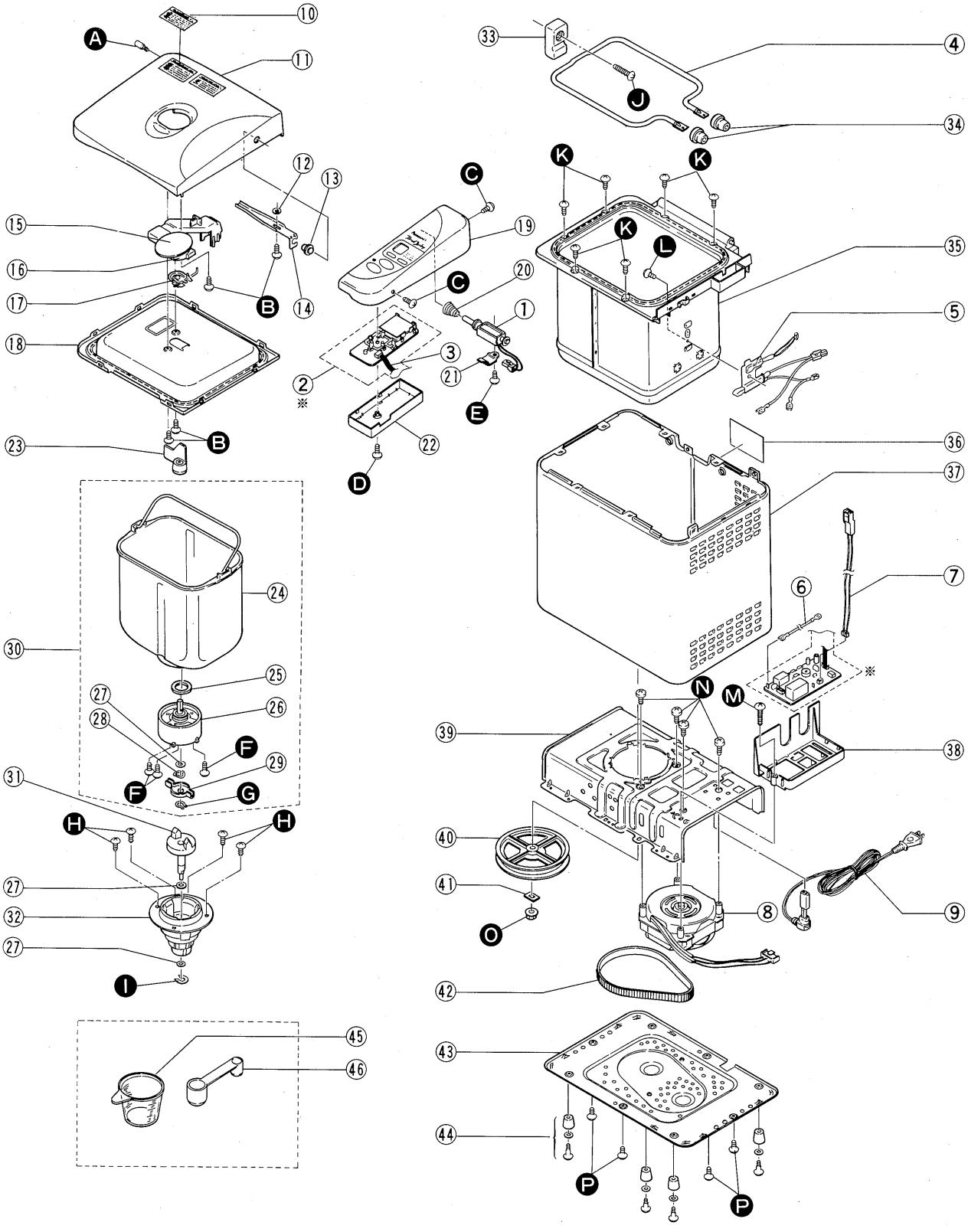
	Operation procedure	LCD indication	Symptom	Check/Result	Remedy
Step 2	Perform the Function Quick Check Test Procedure mode	(SD-YD200 only)	If LCD indicates correct display.	→ Correct condition, proceed to Step 3.	
		All segments of the LCD and the Complete LED (Red) light up.	The operation LED does not light up.	→	● Replace the circuit board assembly. (or LED1)
			Indication does not change.	Is resistance between TP(47)-(48) 0Ω when the (SELECT) button is pressed? NO →	● Replace the circuit board assembly (or SW1)
				YES ↓ Is resistance between TP(47)-(49) 0Ω when the (TIMER) button is pressed? NO →	● Replace the circuit board assembly (or SW2)
				YES ↓ Is resistance between TP(50)-(51) 0Ω when the (START/STOP) button is pressed? NO →	● Replace the circuit board assembly (or SW3)
				YES ↓ Is resistance between TP(50)-(52) 0Ω when the (MENU) button is pressed? NO →	● Replace the circuit board assembly (or SW4)
				YES →	● Replace the circuit board assembly.
		Any combination other than the above.		→	● Replace the circuit board assembly.
Step 3	Perform Motor Operation mode confirmation test	In correct LCD indications or motor function.	The LED does not light up.	→	● Replace the circuit board assembly.
			(SD-YD200 only) The yeast dispensing chute does not open.	Are the lead wires for the solenoid connected? NO →	● Connect the lead wires.
				YES ↓ Check the resistance of the solenoid and lead wires at connector CN 6 of the circuit board. Do not remove connector from board. Check resistance from bottom side of circuit board. Resistance should be approx. 250Ω NO →	● Replace the solenoid.
				YES ↓	

	Operation procedure	LCD indication	Symptom	Check/Result	Remedy
Step 3			(SD-YD200 only)	YES ↓ Does the yeast dispensing chute open when TP(7)-(9) is short circuited? NO → ● Replace the circuit board assembly (or triac 2) YES → ● Replace the circuit board assembly.	
			The kneading motor does not turn.	Is the resistance between TP(5)-(4) resistance should be approx. 0 Ω? YES → ● Replace the kneading motor. NO → ● Replace the circuit board assembly.	
			The kneading motor does not turn forward.	Does it turn forward when TP(5)-(14) is short circuited? NO → ● Replace the circuit board assembly (or Q3) YES → ● Replace the circuit board assembly.	
Step 4	Perform RISE mode confirmation test.	BAKE RAPID The LED (Red) lights up and a temp. of approx. 90°F (32°C) is maintained by a current flow to the heater at a ratio of 3.2/32(10%)	The Bread pan temp. is not correct. Bread won't rise properly.	Is the Bread pan temp. between 82°F (28°C) and 97°F (36°C) NO →	★ See countermeas below.
Step 5	Perform BAKE mode confirmation test.	TEMP ALERT The complate LED (Red) lights up.	Current does not flow to the heater. (550 WATTS)	Is the resistance between TP(2)-(4) approx. 25Ω? NO → ● Replace the heater. YES ↓ Is there approx. 20VDC between TP(12)-(33) (The relay power supply circuit?) NO → ● Replace the circuit board assembly. YES ↓ Does current flow to the heater when Q2 (between C-E) is short circuited? NO → ● Replace the circuit board assembly (or Q2) YES → ● Replace the circuit board assembly.	

★Bake one loaf of bread using fresh ingredients. (See note below)
If one loaf fails to rise properly, replace the PC board.

Note : It is recommended to use "Rapid Rise" yeast because it's finer grain size dissolves more completely in the dough ball.
The baking of on loaf of bread may be excused if the servicer can confirm proper bread pan temperature by instrument (Thermometer or Thermocouple usage) as indicated above, normal RISE mode temperature will vary between 82°F (28°C) and 97°F (36°C), and normal BAKE mode temperature will vary between 291°F (144°C) and 327°F (164°C).

EXPLODED VIEW Model No. SD-YD200 (CANADA)



REPLACEMENT PARTS LIST Model No. SD-YD200 (CANADA)

Important safety notice

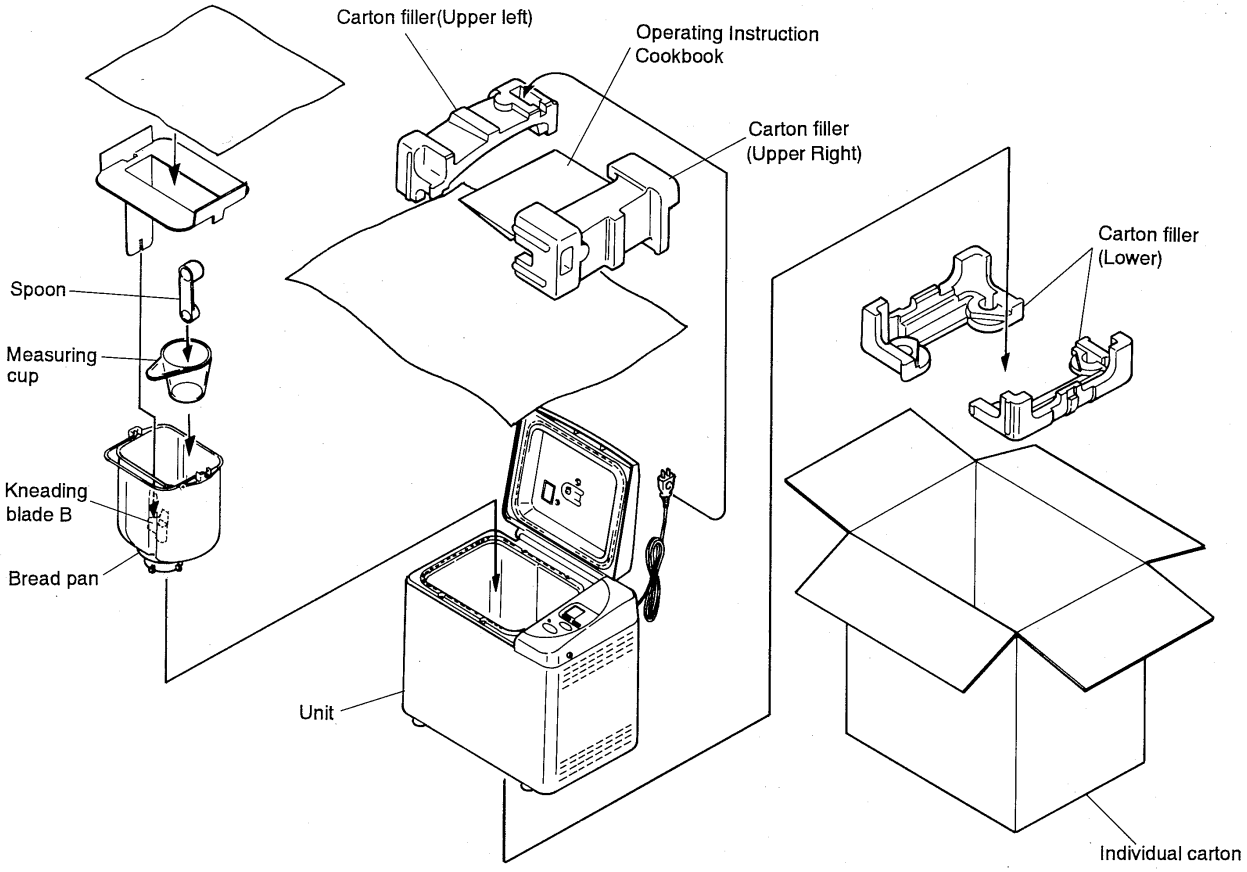
Compornents identified by ⚠ mark have special characteristics important for safety.

When replacing any of these compornent, use only manufacturer's specified parts.

Ref. No.		Part No.	Part Co.	Part Name & Description	Pcs/Set	Remarks
1	⚠	ADA21A115	003 454 1165 4	Solenoid	1	
2	⚠	ADR10A115-0S	003 485 7911 7	P. C. Board Ass'y	1	
3	⚠	ADP10A115	003 497 8298 8	Flat cable	1	
4	⚠	ADA22A115	002 363 1941 2	Heater	1	
5	⚠	ADA11A107	001 191 1675 5	Temp. sensor(Thirmister)	1	W/Temp. fuse
6	⚠	ADP97A107	003 497 5815 8	Lead wire B	1	(White, for heater)
7	⚠	ADP11A115	003 497 9918 6	Lead wire A	1	(Red, for solenoid)
8	⚠	ADA10A115	002 311 8298 8	Kneading motor	1	
9	⚠	ADA24A107	003 490 7918 9	Power cord Ass'y	1	
LED1	⚠	LN29RPXTX2DK	001 035 0748 2	Light emitting diode	1	(Red)
SW1~4	⚠	EVQ21505R	003 435 7815 6	Tact switch	4	
TR1	⚠	AC03DGM6S13	001 034 0585 8	Triac 1	1	
TR2	⚠	BCR1AM8TB	001 034 0637 3	Triac 2	1	
ZNR	⚠	ERZTC5AK241U	001 192 0699 6	Surge absorbers	1	
BZ	⚠	PKM13EPY4000	002 340 0494 5	Buzzer	1	
RL	⚠	AJZ3212M07	003 450 4931 8	Relay	1	
10		ADY02C107	031 984 0026 4	Caution label	1	
11		ADD01A115-W	031 801 0178 9	Top lid	1	
12		ASD878-108-W	031 650 0183 1	Washer A	1	
13		ASD194-108-K	031 653 0145 2	Rubber cushion	1	
14		ADD22A115	031 650 0313 9	Lever	1	
15		ADD04A115-H	031 802 0656 5	Yeast dispenser cover	1	
16		ADD03A115	031 870 0522 6	Yeast dispenser	1	
17		ASD849-108	031 650 0185 9	Yeast dispensing chute	1	
18		ADD02A115	031 640 0775 9	Inner lid	1	
19		ADA07A115-WS	031 840 0286 7	Control panel	1	
20		ASD850-108-W	031 726 0093 3	Spring A	1	
21		ASD525-108-W	031 630 0107 5	Solenoid holder plate	1	
22		ADT03A115	031 652 0383 5	P. C. B. Cover	1	
23		ADA04A105	031 652 0274 9	Kneading blade B	1	
24		ADA12A115-0S	031 870 0523 5	Bread pan	1	
25		ASD191U103-K	007 590 4509 5	Packing	1	
26		ADA29A115	031 757 0080 5	Mounting shaft unit	1	
27		AMX28H-L50	031 643 0123 4	Motor washer A	3	
28		AMX13B-451	031 643 0083 5	Wave washer	1	
29		ASD863-102-W	031 760 0077 9	Connector upper	1	
30		ADA12A115	031 800 0805 0	Bread pan Ass'y	1	No. 24~29 Set
31		ADE97A107	031 652 0082 2	Connector lower	1	
32		ADE98A115	031 650 0310 2	Heater case base	1	
33		ADE09A107	031 600 0054 9	Heater bobbin A	1	
34		ASD452-108-K	031 600 0050 3	Heater bobbin B	2	
35		ADA16A115-0S	031 611 0024 4	Heater case	1	
36		ADY01C115	031 861 0317 0	Raitng plate	1	
37		ADB01A115-W	031 800 0806 9	Body	1	
38		ADB10A107	031 652 0306 8	P. C. B. holder	1	
39		ADE01A115	031 650 0314 8	Angle	1	
40		ASD152-101-K	031 741 0049 0	Pully B	1	
41		ASD867-100-W	031 650 0143 9	Lock washer	1	
42		ASD158-108-W	031 752 0025 7	Belt	1	
43		ADB02A115	031 802 0657 4	Bottom plate	1	
44		ADA28A107	031 828 0027 6	Rubber foot	4	
45		ADD14A103	031 901 0022 1	Measuring cup	1	
46		ASD911U112-K	031 900 0167 0	Measuring spoon	1	

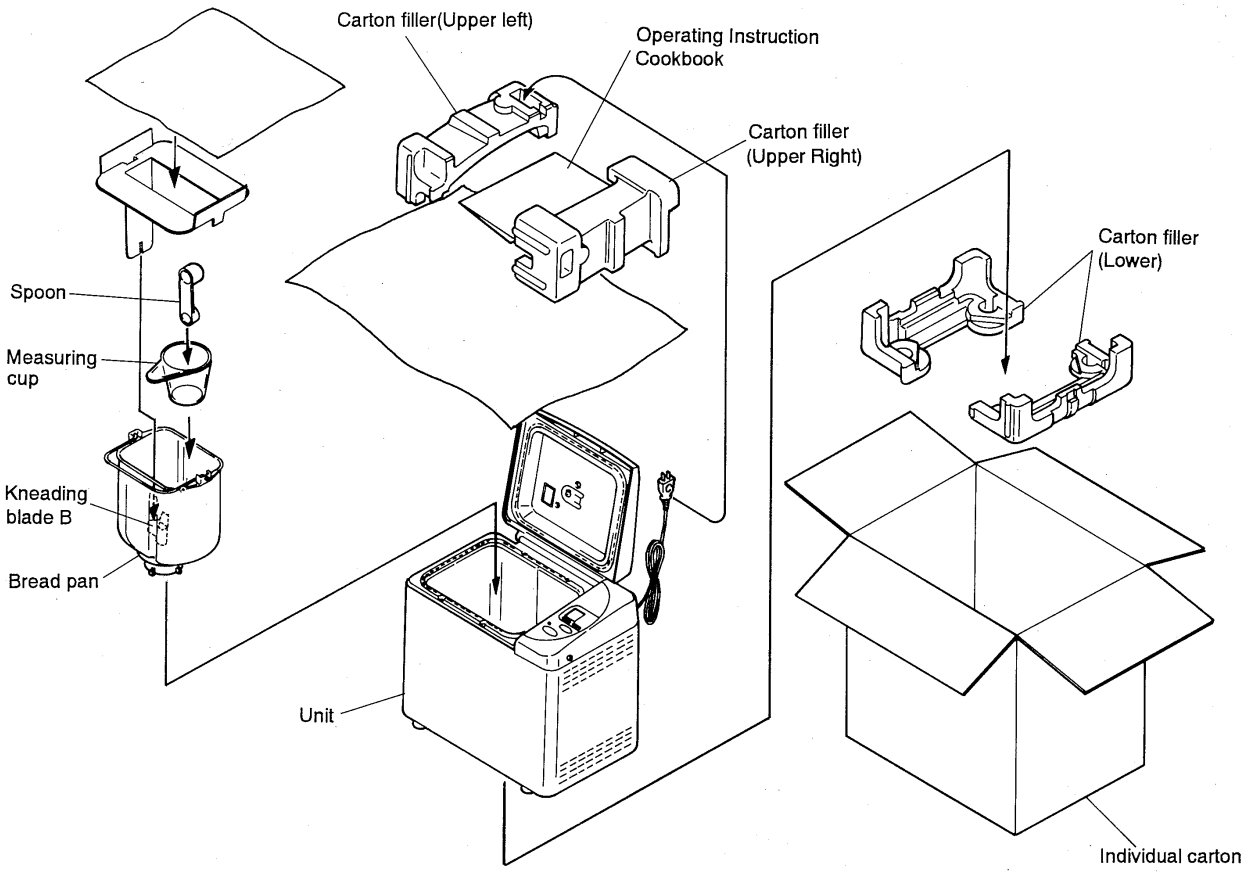
Ref. No.		Part No.	Part Co.	Part Name & Description	Pcs/Set	Remarks
A		ADJ15A107		+Screw	1	
B		XTT4+10BFC		+Screw	4	
C		ADJ06A107		+Screw	2	
D		XTN4+16CFX		+Screw	1	
E		XTB4+14B		+Screw	1	
F		ASD934U103		+Screw	3	
G		XUB8V		C-crip	1	
H		XTB4+10HFC		+Screw	4	
I	Ⓢ	XUE6FT		U-crip	1	
J		XTT4+18HFC		+Screw	1	
K		ADJ03A107		+Screw	6	
L		XTT4+8FFC-S		+Screw	1	
M		XTT4+20FFX		+Screw	1	
N		ASD938-101-D		+Screw	4	
O		ADJ16A107		Nut	1	
P		ASD881-100-Z		+Screw	4	
		ADZ50C115	031 983 0585 3	Operating Instractions	1	W/Cook Book (SD-YD200/200)
		ADZ01C115	031 971 1184 8	Indvidual carton	1	
		ADZ47A115	031 977 0277 8	Carton filler	1	

CARTON PACKING INSTRUCTIONS

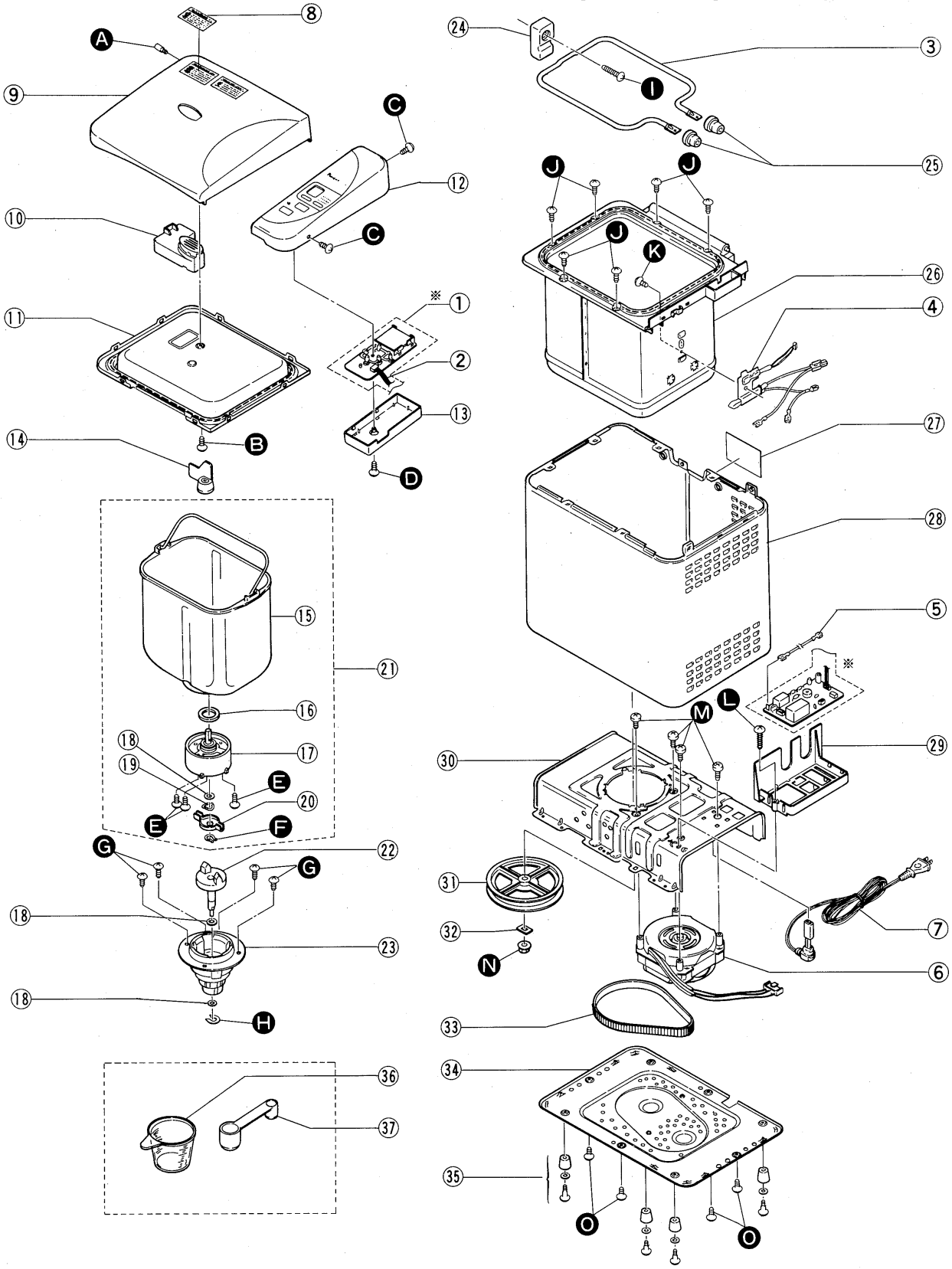


Ref. No.		Part No.	Part Co.	Part Name & Description	Pcs/Set	Remarks
A		ADJ15A107		+Screw	1	
B		XTT4+10BFC		+Screw	4	
C		ADJ06A107		+Screw	2	
D		XTN4+16CFX		+Screw	1	
E		XTB4+14B		+Screw	1	
F		ASD934U103		+Screw	3	
G		XUB8V		C-crip	1	
H		XTB4+10HFC		+Screw	4	
I	Ⓢ	XUE6FT		U-crip	1	
J		XTT4+18HFC		+Screw	1	
K		ADJ03A107		+Screw	6	
L		XTT4+8FFC-S		+Screw	1	
M		XTT4+20FFX		+Screw	1	
N		ASD938-101-D		+Screw	4	
O		ADJ16A107		Nut	1	
P		ASD881-100-Z		+Screw	4	
		ADZ50C115	031 983 0585 3	Operating Instractions	1	W/Cook Book (SD-YD200/200)
		ADZ01C115	031 971 1184 8	Indvidual carton	1	
		ADZ47A115	031 977 0277 8	Carton filler	1	

CARTON PACKING INSTRUCTIONS



EXPLODED VIEW Model No. SD-200 (CANADA)



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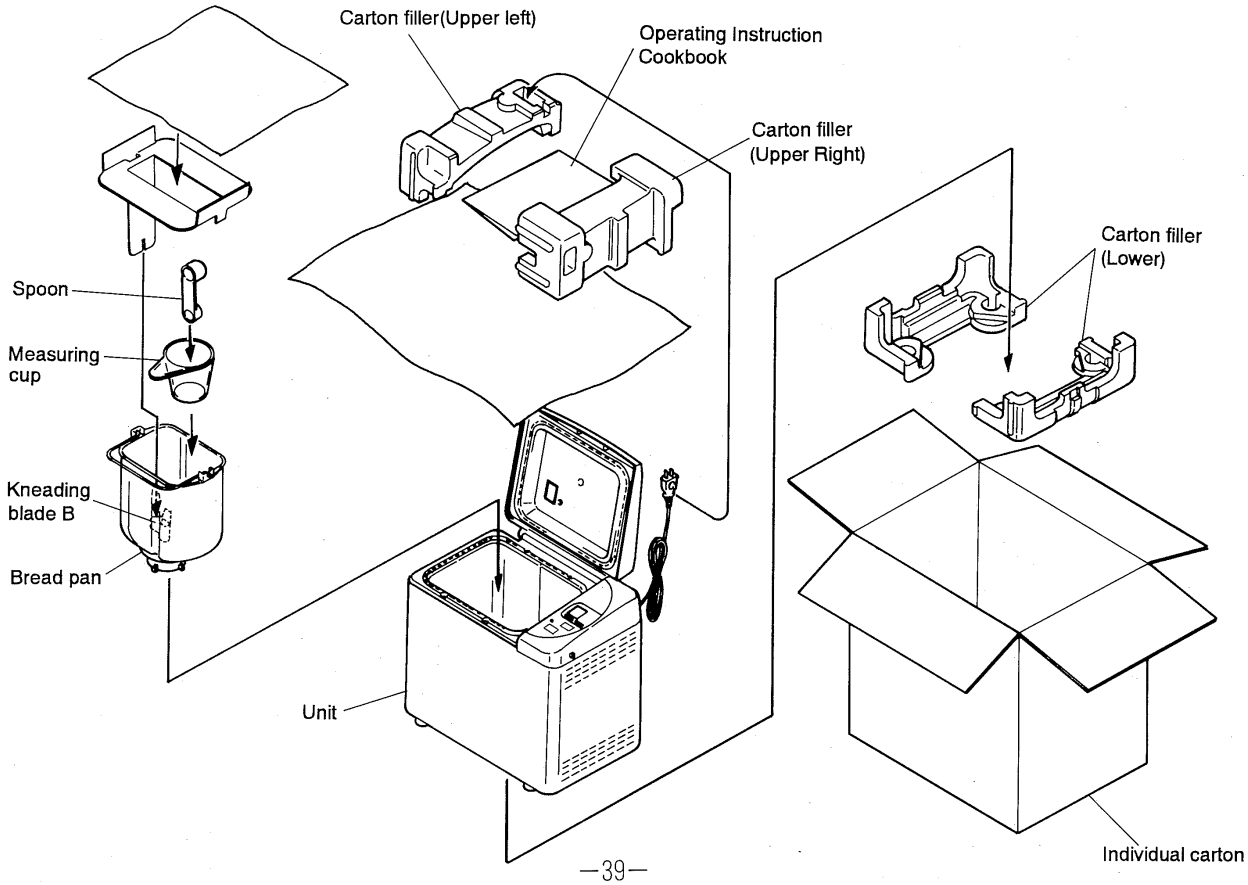
Ref. No.		Part No.	Part Co.	Part Name & Description	Pcs/Set	Remarks
1	⚠	ADR10A117-0S	003 485 7912 6	P.C.Board Ass'y	1	
2	⚠	ADP10A115	003 497 8298 8	Flat cable	1	
3	⚠	ADA22A115	002 363 1941 2	Heater	1	
4	⚠	ADA11A107	001 191 1675 5	Temp. sensor(Thirmister)	1	W/Temp. fuse
5	⚠	ADP97A107	003 497 5815 8	Lead wire B	1	(White, for heater)
6	⚠	ADA10A115	002 311 8298 8	Kneading motor	1	
7	⚠	ADA24A107	003 490 7918 9	Power cord Ass'y	1	
LED1	⚠	LN29RPXTX2DK	001 035 0748 2	Light emitting diode	1	(Red)
SW1-4	⚠	EVQ21505R	003 435 7815 6	Tact switch	4	
TR1	⚠	AC03DGM6S13	001 034 0585 8	Triac 1	1	
ZNR	⚠	ERZTC5AK241U	001 192 0699 6	Surge absorbers	1	
BZ	⚠	PKM13EPY4000	002 340 0494 5	Buzzer	1	
RL	⚠	AJZ3212M07	003 450 4931 8	Relay	1	
8		ADY02C107	031 984 0026 4	Caution label	1	
9		ADD01A117-W	031 801 0179 8	Top lid	1	
10		ADD05A117	031 652 0385 3	Steem vent	1	
11		ADD02A117	031 640 0776 8	Inner lid	1	
12		ADA07A117-W	031 840 0287 6	Control panel	1	
13		ADT03A115	031 652 0383 5	P.C.B.Cover	1	
14		ADA04A105	031 652 0274 9	Kneading blade B	1	
15		ADA12A115-0S	031 870 0523 5	Bread pan	1	
16		ASD191U103-K	007 590 4509 5	Packing	1	
17		ADA29A115	031 757 0080 5	Mounting shaft unit	1	
18		AMX28H-L50	031 643 0123 4	Motor washer A	3	
19		AMX13B-451	031 643 0083 5	Wave washer	1	
20		ASD863-102-W	031 760 0077 9	Connector upper	1	
21		ADA12A115	031 800 0805 0	Bread pan Ass'y	1	No. 15~20 Set
22		ADE97A107	031 652 0082 2	Connector lower	1	
23		ADE98A115	031 827 0217 7	Heater case base	1	
24		ADE09A107	031 600 0054 9	Heater bobbin A	1	
25		ASD452-108-K	031 600 0050 3	Heater bobbin B	2	
26		ADA16A115-0S	031 611 0024 4	Heater case	1	
27		ADY01C117	031 861 0318 9	Raitng plate	1	
28		ADB01A115-W	031 800 0806 9	Body	1	
29		ADB10A107	031 652 0306 8	P.C.B.holder	1	
30		ADE01A115	031 650 0314 8	Angle	1	
31		ASD152-101-K	031 741 0049 0	Pully B	1	
32		ASD867-100-W	031 650 0143 9	Lock washer	1	
33		ASD158-108-W	031 752 0025 7	Belt	1	
34		ADB02A115	031 802 0657 4	Bottom plate	1	
35		ADA28A107	031 828 0027 6	Rubber foot	4	
36		ADD14A103	031 901 0022 1	Measuring cup	1	
37		ASD911U112-K	031 900 0167 0	Measuring spoon	1	

Ref. No.		Part No.	Part Co.	Part Name & Description	Pcs/Set	Remarks
A		ADJ15A107		+Screw	1	
B		XTT4+10BFC		+Screw	1	
C		ADJ06A107		+Screw	2	
D		XTN4+16CFX		+Screw	1	
E		ASD934U103		+Screw	3	
F		XUB8V		C-crip	1	
G		XTB4+10HFC		+Screw	4	
H	Ⓢ	XUE6FT		U-crip	1	
I		XTT4+18HFC		+Screw	1	
J		ADJ03A107		+Screw	6	
K		XTT4+8FFC-S		+Screw	1	
L		XTT4+20FFX		+Screw	1	
M		ASD938-101-D		+Screw	4	
N		ADJ16A107		Nut	1	
O		ASD881-100-Z		+Screw	4	
		ADZ50C115	031 983 0585 3	Operating Instractions	1	W/Cook Book (SD-YD200/200)
		ADZ01C117	031 971 1185 7	Indvidual carton	1	
		ADZ47A115	031 977 0277 8	Carton filler	1	

CARTON PACKING INSTRUCTIONS



Ref. No.		Part No.	Part Co.	Part Name & Description	Pcs/Set	Remarks
A		ADJ15A107		+Screw	1	
B		XTT4+10BFC		+Screw	1	
C		ADJ06A107		+Screw	2	
D		XTN4+16CFX		+Screw	1	
E		ASD934U103		+Screw	3	
F		XUB8V		C-crip	1	
G		XTB4+10HFC		+Screw	4	
H	Ⓢ	XUE6FT		U-crip	1	
I		XTT4+18HFC		+Screw	1	
J		ADJ03A107		+Screw	6	
K		XTT4+8FFC-S		+Screw	1	
L		XTT4+20FFX		+Screw	1	
M		ASD938-101-D		+Screw	4	
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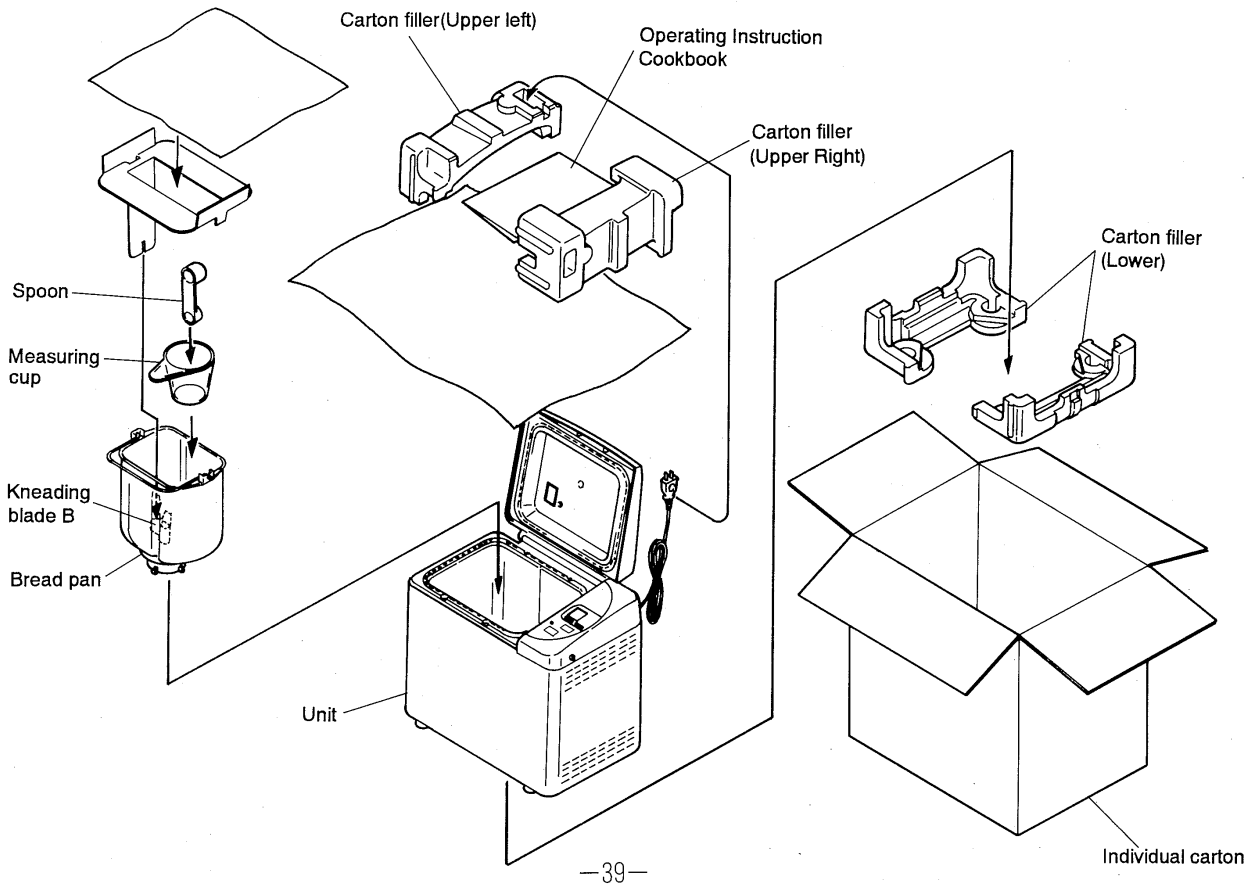
CARTON PACKING INSTRUCTIONS



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